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ABSTRACT

The fourth national inventory of computers in higher education, 1976-77 is presented. The four inventories together provide detailed snapshots of the history of computer utilization by U.S. higher education since 1964. The contents of the publication include a description of the inventory and statistical data on the computer systems, expenditures and sources of support, computer installations by type of usage and responsible officer, and computer sciences and related degree programs. Summary data are presented in six sections concerning: (1) expenditures, sources of income, staff, languages, and types of billing and services; (2) computers (3) instructional and research use by academic area for 1976-77; (4) computer science and related degree programs--staff, majors, and degrees awarded; (5) computer science, data processing, information science, etc. courses by general descriptors; and (6) institutional administration applications. Appendices include forms and instructions. (SW)

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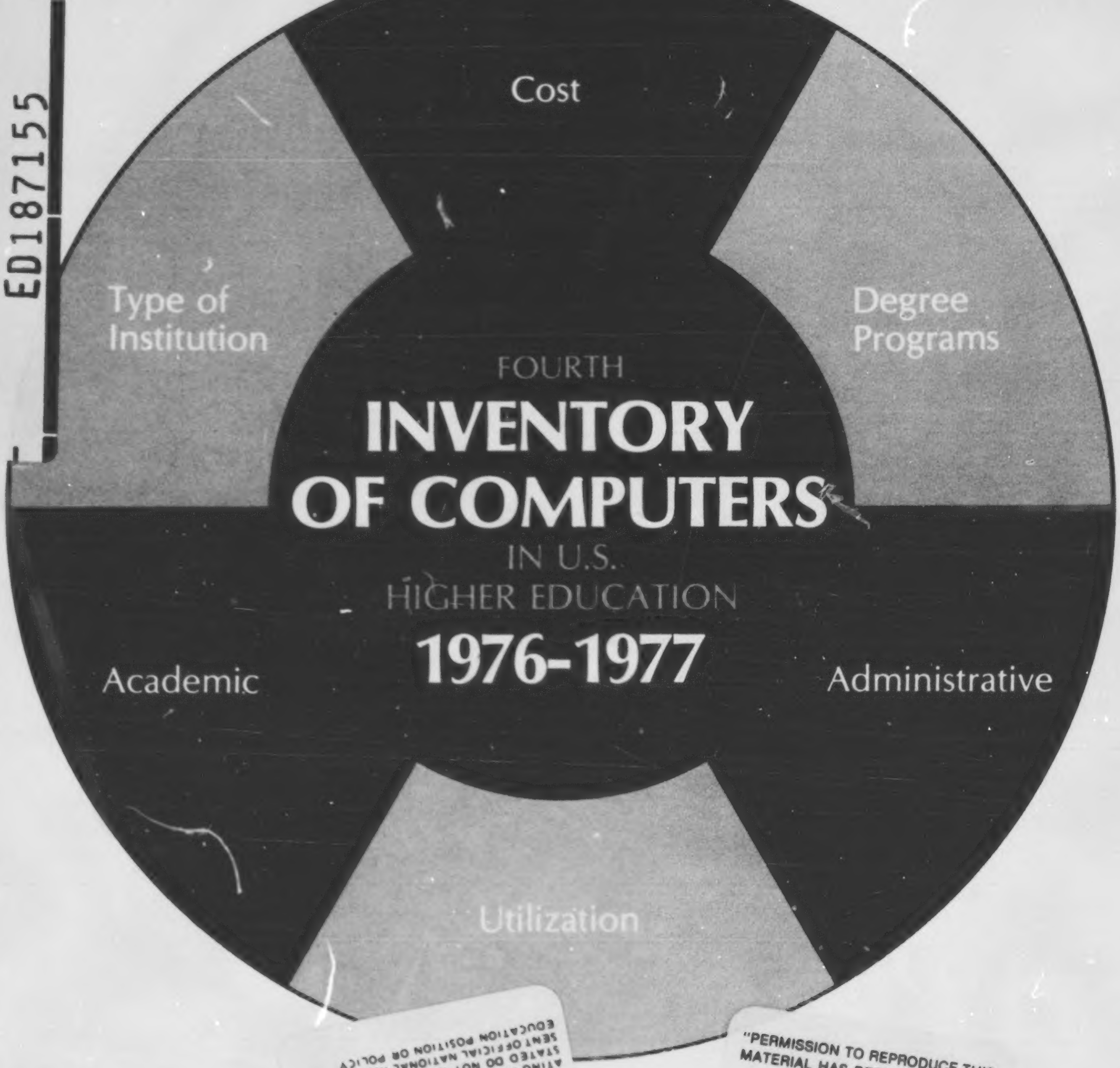
Cost
Type of Institution
Degree Programs
Academic
Administrative
Utilization

FOURTH

INVENTORY OF COMPUTERS

IN U.S.
HIGHER EDUCATION

1976-1977

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Fourth Inventory
Computers in Higher Education 1976-77

edited by:
John w. Hamblen
Thomas B. Baird

EDUCOM

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Several persons at NSF were consulted throughout all phases of the inventory. In particular, Dr. Andrew Molnar served as program officer for the current project.

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Project Director

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I. INTRODUCTION

1. Background.

This is the fourth publication on computers in higher education by the author. The first three were prepared by the Computer Sciences Project of the Southern Regional Education Board with support via contracts with the Office of Computing Activities of the National Science Foundation. The first one (1) was published by the SREB and the second and third (2) (3) by NSF. These four publications provide detailed snapshots of the history of computer utilization by U.S. higher education since 1964. Approximately 2150 institutions (or campuses) of higher education are now spending nearly 1 billion dollars annually for computer facilities and their operation. This amounts to more than 2% of estimated total expenditures for higher education during 1976-77. Although some tightening up and reshuffling of computer facilities occurred in institutions which had been depending heavily upon the federal government for support, the total expended continued to increase. Computers have become an integral part of and an expected tool in higher education. The way in which the facilities are provided and the manner in which they are managed will no doubt have to change as usage becomes universal and new systems are introduced. But one thing appears certain, computer usage will still continue to pervade the campus.

2. The Inventory.

Table I-1 gives the number of institutions (N) in each of the groups of institutions obtained by stratifying on three characteristics of the institutions. The characteristics used were:

Control:
1. Public
2. Private

Highest Level of Offering:
1. Associate
2. Bachelor's
3. Master's
4. Doctorate

Enrollment (Fall 1975) Class:
1. Below 500
2. 500- 2,499
3. 2,500- 9,999
4. 10,000-19,999
5. 20,000 and above

This stratification produced 83 non-empty groups of the 90 possible.

The major steps toward the accomplishment of the inventory were as follows:

2.1 File Initiation

A copy of the U.S. Office of Education's National Center for Educational Statistics 1976 HEGIS directory file was obtained and used to initiate a file for each institution.

2.2 Contents of the Data File

An independent follow-up study was made after the previous (1969-70) survey in order to evaluate the quality of the responses. The current questionnaire has been modified to include the findings from the follow-up study.

The 1969-70 questionnaire was mailed in July of 1975 to 31 academic organizations, associations, and agencies for comment. Their comments have been considered in the design of the current instrument. (see appendix)

Table I-1
Response Rates and Extrapolation Ratios

Group	N Total No. Institutions	n No. Inst. Responding	$\frac{n}{N}$ Response Rates	$\frac{N}{n}$ Extrap. Ratio
All Institutions	3136	1822	.58	Not Applicable
Control:				
All Public Inst.	1509	877	.58	"
All Private Inst.	1627	945	.58	"
Highest Level of Offering:				
Associate Degree	1196	655	.55	"
Bachelor's Degree	801	461	.58	"
Master's Degree	717	422	.59	"
Doctorate	422	284	.67	"
Enrollment (Fall 1976) Class:				
Below 500	662	392	.59	"
500 -- 2,499	1382	779	.56	"
2,500 -- 9,999	775	443	.57	"
10,000 --19,999	205	131	.64	"
20,000 and above	112	77	.69	"
Control and Level:				
Public Associate	937	503	.54	"
Bachelor's	97	61	.63	"
Master's	268	161	.60	"
Doctorate	207	152	.73	"
Private Associate	259	152	.59	"
Bachelor's	704	400	.57	"
Master's	449	261	.58	"
Doctorate	215	132	.61	"
Control and Enrollment Class:				
Public Below 500	69	37	.54	"
500 -- 2,499	570	323	.57	"
2,500 -- 9,999	583	329	.56	"
10,000 -- 19,999	184	116	.63	"
20,000 and above	103	72	.70	"
Private Below 500	593	355	.60	"
500 -- 2,499	812	456	.56	"
2,500 -- 9,999	192	114	.59	"
10,000 -- 19,999	21	15	.71	"
20,000 and above	9	5	.56	"
Level and Enrollment Class:				
Associate Below 500	213	128	.60	"
500 -- 2,499	538	297	.55	"
2,500 -- 9,999	340	174	.51	"
10,000 -- 19,999	82	39	.48	"
20,000 and above	23	17	.74	"
Bachelor's Below 500	226	119	.53	"
500 -- 2,499	513	306	.60	"
2,500 -- 9,999	60	35	.58	"
10,000 -- 19,999	2	1	.50	"
20,000 and above	0	----	----	"
Master's Below 500	148	96	.65	"
500 -- 2,499	259	130	.50	"
2,500 -- 9,999	261	161	.62	"
10,000 -- 19,999	40	32	.80	"
20,000 and above	9	3	.33	"

Table I-1 (cont'd)
Response Rates and Extrapolation Ratios

Group	N Total No. Institutions	n No. Inst. Responding	$\frac{n}{N}$ Response Rates	$\frac{N}{n}$ Extrap. Ratio
Level and Enrollment Class: cont'd				Not
Doctorate Below 500	75	49	.65	Applicable
500 -- 2,499	72	46	.64	"
2,500 -- 9,999	114	73	.64	"
10,000 -- 19,999	81	59	.73	"
20,000 and above	80	57	.71	"
Control, Level and Enrollment Class (Elementary Groups)				
Public Associate Below 500	52	28	.54	1.9
500 -- 2,499	448	249	.56	1.8
2,500 -- 9,999	332	170	.51	2.0
10,000 -- 19,999	82	39	.48	2.1
20,000 and above	23	17	.74	1.4
Bachelor's Below 500	4	2	.50	2.0
500 -- 2,499	55	34	.62	1.6
2,500 -- 9,999	36	24	.67	1.5
10,000 -- 19,999	2	1	.50	2.0
20,000 and above	0	---	---	---
Master's Below 500	11	6	.55	1.8
500 -- 2,499	39	22	.56	1.8
2,500 -- 9,999	172	101	.59	1.7
10,000 -- 19,999	37	29	.78	1.3
20,000 and above	9	3	.33	3.0
Doctorate Below 500	2	1	.50	2.0
500 -- 2,499	28	18	.64	1.6
2,500 -- 9,999	43	34	.79	1.3
10,000 -- 19,999	63	47	.75	1.3
20,000 and above	71	52	.73	1.4
Private Associate Below 500	161	100	.62	1.6
500 -- 2,499	90	48	.53	1.9
2,500 -- 9,999	8	4	.50	2.0
10,000 -- 19,999	0	---	---	---
20,000 and above	0	---	---	---
Bachelor's Below 500	222	117	.53	1.9
500 -- 2,499	458	272	.59	1.7
2,500 -- 9,999	24	11	.46	2.2
10,000 -- 19,999	0	---	---	---
20,000 and above	0	---	---	---
Master's Below 500	137	90	.66	1.5
500 -- 2,499	220	108	.49	2.0
2,500 -- 9,999	89	60	.67	1.5
10,000 -- 19,999	3	3	1.00	1.0
20,000 and above	0	---	---	---
Doctorate Below 500	73	48	.66	1.5
500 -- 2,499	44	28	.64	1.6
2,500 -- 9,999	71	39	.55	1.8
10,000 -- 19,999	18	12	.67	1.5
20,000 and above	9	5	.56	1.8

Associations and Individuals Invited to Make Recommendations on Forms Content

National Science Foundation
American Association of Collegiate Registrars and Admissions Officers
National Association of College Business Officers
Central Association of College and University Business Officers
Eastern Association of College and University Business Officers
Southern Association of College and University Business Officers
Western Association of College and University Business Officers
American Council on Education
American Association for Higher Education
Association of American Colleges
Association of American Universities
Association of Governing Boards of State Universities and Allied Institutions
Association of State Colleges and Universities
National Association of State Universities and Land Grant Colleges
New England Association of Colleges and Secondary Schools
New England Board of Higher Education
Southern Regional Educational Board
Western Interstate Commission for Higher Education
U.S. Office of Education: National Center for Education Statistics
Office of Management and Budget
Association for Computing Machinery
Association for Educational Data Systems
American Association of Junior Colleges
Education Commission of the States
American Institute for Research
Human Resources Research Organization (Seidel)
National Institute of Education
National Institute of Health
The Rand Corporation (Levien)
Dr. Charles Mosmann
EDUCOM (Heller)

On October 28, 1975, before submitting the questionnaire to OMB, 18 representatives from instructional, research, and administrative users groups and consortia, state boards of higher education, colleges, and universities met to review the questionnaire question-by-question to ensure that each question was a valid and usable item.

After several conferences with the staff of the National Science Foundation and the Office of Management and Budget it was decided that several changes would be made in the kind of data collected and in some instances the way in which it was to be reported. The final forms, the instructions and copies of all enclosures which accompanied the forms to the institutions are included in this appendix.

2.3 Continuous Forms were Designed

Continuous forms were again designed in order to permit personalization of the data collection forms. The necessary classification codes, name, address, and zip code of the institution were printed on the forms prior to mailing. This insured a complete coverage according to the contents of the USOE HEGIS directory file. (See appendix)

2.4 Preparation and Dissemination of Forms

The name and address of the institution and the state and institution codes were printed on the forms prior to mailing. A mailing label was also printed from the same file. All mailings were sent to the "President" of the institution. Additional sets of forms were enclosed in the mailing to the major institutions (universities) which had reported multiple installations in 1969-70. All forms were mailed between July 16-31, 1977. A self-addressed, postage paid return envelope was enclosed.

2.5 Methods of Follow-up to Increase Response Rate

Three follow-up mailings were sent to non-respondents as of October 12, 1977, November 25, 1977 and January 25, 1978. These were sent in order to increase the response rate in a minimum length of time. The institutions were encouraged to make collect calls to FICHE if questions arose. Nearly 350 calls were received. This proved to be a useful, though time consuming, activity. Nearly all responses were received before March 1978.

2.6 Response Rates and Extrapolation Ratios

Table I-1 gives the number of institutions (N) in each of the groups of institutions obtained by stratifying on three characteristics of the institutions. These produced 83 non-empty groups of the 90 possible. For each grouping, the number of responding institutions (n), the response rate (n/N) and an extrapolation ratio (N/n), where applicable, are presented.

2.7 Editing of Responses

The editing process was greatly enhanced by the forms design but was still very time consuming. In all cases the editing was accomplished directly on the forms which were sent in by the respondents. Over 200 telephone calls were made to obtain clarifications.

2.8 Card Punching

The forms design permitted the card punching to be done directly from the edited form. The usual procedures require that the data be transcribed to another form. This very time-consuming and error-prone process was completely bypassed. The card punch operators did not report any difficulties in punching from the edited forms so long as the data was carefully recorded and the original forms or good copies were used.

3. Appraisal of Accuracy of Responses.

Careful editing of the responses assures that the data as reported is contained in the file with a high degree of accuracy. In addition to the pre-editing (before card punching) three detail printouts were examined carefully and corrections made before summaries were processed. As the file was used any significant errors noticed were corrected and affected summaries rerun.

The tone of several hundred telephone conversations with the respondents indicates that the respondents made a conscientious effort to respond as accurately and thoroughly as they had data available to do so.

4. Creation of Master File.

A master file has been created on magnetic tape consisting of one 2399 character record for each installation within each institution for a total of 3808 records. A skeleton record is included for each institution which was in the file obtained from USOE. The program update file updates on a "whole card" basis presented in any sequence and is written in ANSI COBOL as are all other programs associated with the inventory.

Another program prepares printer back-up tapes for each of the forms and one containing a list on non-respondents (skeleton files). This program provides a means for printing the data as contained in the file, in the same format as the data collection form, for reference to detail information on an individual installation and for proofing the file.

5. Summarization of Responses.

It was agreed that the same three control variables which were used in the 1969-70 inventory would again be used with the same categories. These variables produced 40 elementary groups (2 x 4 x 5) and 50 groupings of the elementary groups, or a total of 90 possible summaries for each form.

The summaries selected are by no means exhaustive and numerous others may be of interest.

Summaries for each of the elementary groups, (except sections V, VII, and X which were too voluminous) each level or category of the classification variables and a total summary are included in Sections VI-X for FORMS 1-4 respectively. A few groups were omitted in order to maintain confidentiality since only one or two institutions were included in the summary.

6. Population Estimates.

The values contained in the summaries are straight summations for those installations which reported on each item. Approximate totals can be obtained for the population if the following assumption is made:

> Installations existed during 1976-77 in the non-reporting institutions of each elementary group in the same proportion as for the reporting institutions in that group.

i.e. If N_{ijk} = number of institutions in the ith control, jth level and kth enrollment class group [group (i, j, k)],

n_{ijk} = number of institutions reported from group (i, j, k)

C_{ijk} = number of institutions in group (i, j, k) reporting at least one installation

then $\frac{C_{ijk}}{n_{ijk}}(N_{ijk} - n_{ijk})$ = the number of non-reporting institutions in group (i, j, k) estimated to have had installations in 1976-77.

Hence

$$\frac{\frac{C_{ijk}}{n_{ijk}}(N_{ijk} - n_{ijk}) + C_{ijk}}{C_{ijk}} = \frac{N_{ijk}}{n_{ijk}} \geq 1$$

is the factor by which totals for group (i, j, k) can be multiplied to obtain estimates for the population of institutions in group (i, j, k). If X_{ijkl} = the lth (any) total appearing in the summary for 1976-77 or 1977-78, then $\frac{N_{ijk}\ X_{ijkl}}{n_{ijk}}$ becomes our estimate of the population total for that item in group (i, j, k). This method should not be applied to groupings of the elementary groups since the larger groupings are less homogeneous and our assumption would, in general, be less valid. For combinations of elementary groups we should combine the population estimates of the appropriate elementary groups, for example:

$$\sum_{i=1}^{2} \frac{N_{ijk}\ X_{ijkl}}{n_{ijk}} \ ; \quad \sum_{j=1}^{4} \frac{N_{ijk}\ X_{ijkl}}{n_{ijk}} \ ; \quad \sum_{k=1}^{5} \frac{N_{ijk}\ X_{ijkl}}{n_{ijk}}$$

$$\sum \sum_{j} \ , \quad \sum_{i} \sum_{k} \ , \quad \sum_{j} \sum_{k} \ , \quad \sum_{i} \sum_{j} \sum_{k}$$

should be used to produce the population estimates for the remaining possible groupings of institutions. An intuitive argument can be made that the adjustment factor $\frac{N_{ijk}}{n_{ijk}}$ may be a little high. To counter this possibility, we are ignoring two other multiplicative factors (each equal to or greater than one) which would tend to offset this. They may be attributed to two circumstances:

a) In most groups an average of more than one installation was reported for each institution.

b) Some reporting installations did not report on certain items because they either did not wish to, or the figures were not available.

7. Publications which have used Data from the Inventory.

The data in the 1969-70 report were used in several major publications on planning in higher education. The Carnegie Commission on Higher Education used data from the survey to make recommendations on computing in higher education. Many publications have used data from the previous surveys and are listed below:

Gilchrist, B. and R. E. Weber. "Employment of Trained Computer Personnel - A Quantitative Survey." Proceedings of 1972 SJCC. Montvale, N.J.: American Federation of Information Processing Societies, Inc.

Gilchrist, B. and R. E. Weber. "Sources of Trained Computer Personnel - A Quantitative Survey." Proceedings of 1972 SJCC. Montvale, N.J.: American Federation of Information Processing Societies, Inc.

Hamblen, John W., "Computers and Degree Programs in Computer Science in Institutions of Higher Education." AEDS MONITOR, Washington D. C.: Association for Educational Data Systems, September 1967.

Hamblen, John W., "Expenditures, Sources of Funds, and Utilization of Digital Computers for Research and Instruction in Higher Education, 1964-65 with Projections for 1968-69." (A portion of Computers in Higher Education.) ACM Communications, April 1968.

Hamblen, John W., "Computers and Related Degree Programs in U.S. Higher Education: 1966-67." Proceedings of the IFIP World Conference on Computer Education 1970, New York: Science Associates International, Inc. December 1970.

Hamblen, John W., "Central Computer Center Organizations and Computer Systems Options for Institutions of Higher Education." Proceedings of Conference on Computers in Instruction: Their Future for Higher Education, RAND Corporation, R-718-NSF/CCOM/RC, 1971.

Hamblen, John W., "Computer Science and Related Degree Programs in U.S. Higher Education". ACM/SIGCSE Bulletin, Volume 1, No. 4, Dec. 1969.

Hamblen, John W., "Computing Facilities in the Small Institutions: 1966-67." Proceedings of 1970 Conference on Computers in the Undergraduate Curricula, University of Iowa, 1970.

Hamblen, John W., "Central Computer Center Organizations and Computer System Options for Institutions of Higher Education", AEDS Journal, Vol. 4, No. 4, June 1971, pp. 109-112.

Hamblen, John W., "Using Computers in Higher Education: Past Recommendations, Status and Needs." Communications of ACM, Vol. 14, No. 11, November 1971, pp. 709-712.

Levien, R. E. et al., The Emerging Technology: Instructional Uses of the Computer in Higher Education, The Rand Corporation, Santa Monica, Calif., CA, R-503-CCOM/NSF/RC, September 1970.

Hamblen, John W., "Production and Utilization of Computer Manpower in U.S. Higher Education", Proceedings of 1972 SJCC, AFIPS Press, Montvale, N.J., May, 1972.

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Alcorn, Bruce K., "The Role of Computers in Small-College Management", National Laboratory for Higher Education, Durham, North Carolina, 1972, 8 pp.

Hamblen, John W., Computer Manpower-Supply and Demand-in SREB States; Booklet commissioned by Southern Regional Education Board, Atlanta, Georgia; 1973.

Hamblen, John W., Computer Manpower-Supply and Demand-By States, Information Systems Consultants, St. James, MO; 39 pp.; 1973, 1975.

Mossmann, Charles, Academic Computers in Service, Jossey, Bass, San Francisco, 1973.

Hamblen, John W., "Computers in Higher Education", Encyclopedia of Computer Science, Mason/Charter, New York, 1976.

Hamblen, John W., "Computing Facilities for Instruction in the Small Colleges", Computers in Teaching and Learning Activities, EXTEND Publications, Center for Research and Learning, University of Michigan, Ann Arbor, 1974.

Rockart, John R. and Michael S. Scott Morton, Computers and the Learning Process in Higher Education, A report prepared for the Carnegie Commission on Higher Education, New York: McGraw-Hill Book Company, 1975.

Hunter, Beverly et al., Learning Alternatives in U. S. Education: Where the Student and Computer Meet, Englewood Cliffs, N.J., Education Technology, 197[illegible].

Mosmann, Charles , Evaluating Instructional Computing, Computing Facility, University of California, Irvine, 1976.

Hamblen, John W., "Administrative Data Processing: Ten Years Later", Proceedings of the 1976 CAUSE National Conference, College and University Systems Exchange, Boulder, Colorado, 1977.

Hamblen, John W., "Academic and Administrative Computing: Where are we?", Bulletin of the Interuniversity Communications Council (EDUCOM), Princeton, New Jersey, Vol. 12, No. 1, Spring 1977.

Mosmann, Charles, (Editor), Statewide Computing Systems: Coordinating Academic Computer Planning, Marcel Dekker, Inc. New York, 1974.

Hamblen, John W., "Computer Manpower in the United States-Supply and Demand", Bulletin of the Association for Computing Machinery Special Interest Group in Computer Science Education, New York, December 1975.

Hamblen, John W., "The Case for an Advanced Graduate Record Examination in Computer Science", Proceedings of Fifth Symposium on Computer Science Education, SIGCSE Bulletin, Association for Computing Machinery, New York, February 1975, Vol. 7, No. 1.

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II. COMPUTERS

1. Number of Computers Reported

Three thousand forty three computers were reported as being in use by June 30, 1977 or on order and in use by December 31, 1977. Table II-1 gives the number of computers reported by manufacturer and model. These were reported by 1599 installations.

2. Population Estimates

By extrapolating on the number of institutions with access to computers as reported for each elementary group and summing over all groups as suggested in Section I, an estimated 2163 institutions had access to computers in late 1977. The estimates are shown in Table II-2. Estimates for groups of institutions in each of the categories of three classification variables are presented in Table II-3, II-4 and II-5.

As of June 30, 1977 (see Table II-6), 973 of the institutions of higher education had no access to computer facilities. The SREB/NSF 1964-65 survey, with a cut-off date of about June 30, 1965, estimated that 707 of the 2219 institutions had computer facilities. In the 1966-67 inventory, two years later, 980 had computer facilities of some sort, 1936 still did not, but by then there were 2477 institutions. For 1969-70 1681 out of 2807 institutions had access to computers. THe number of institutions increased nearly as fast as the number of institutions with their first computer. This is not quite true, because the U.S. Office of Education adopted a new classification scheme and many multi-campus institutions were counted separately in 1966-67, 1969-70 and 1976-77.

3. Student Access to Computers

Over one million (1.3 million) students in higher education still have no access to computer facilities (see Table II-7). For 1964-65, the 1512 institutions without computers enrolled approximately 2.4 million students. The total enrollment then was about six million students. In 1966-67, the 1497 institutions without computers enrolled about 1.6 million students and for 1969-70 the 1126 institutions without computers enrolled approximately 845,000. During 1976-77 there were still an estimated 973 institutions without computers having enrollments of about 1.3 million students.

Table II-1

Number of Computers Reported by U.S.
Institutions of Higher Education
(1822 Institutions Reporting)
June 30, 1977

Manuf	Model	Model Total	Manuf Total
ADG	misc	4	4
ADS	1800	4	4
AMD	470V/6	4	4
BIT	misc	4	4
BUR	7XX	7	103
	1700	5	
	1714	5	
	1726	11	
	17XX	8	
	2700	7	
	3XXX	8	
	4700	5	
	4771	6	
	5500	6	
	5700	5	
	6700	14	
	68XX	4	
	other	12	
CAU	misc	5	5
CDC	CYB73	7	82
	CYB74	6	
	CYB175	4	
	CYB/XX	7	
	3150	6	
	3200	4	
	3300	7	
	3XXX	5	
	6400	16	
	6XXX	6	
	other	14	
DAG	C300	4	166
	ECLIPSE	6	
	NOVA	32	
	NOVA2	29	
	NOVA3	15	
	NOVA800	19	
	NOVA840	6	
	NOVA1200	23	
	NOVA1220	10	
	2XX	8	
	other	14	
DEC	KA10	10	992
	KL10	9	
	LINC	9	
	LSI11	34	
	PDP7	5	
	PDP8	297	
	PDP9	14	
	PDP10	37	
	PDP11	478	
	PDP12	37	
	PDP15	22	
	PDP20	15	
	other	25	
DON	74	5	17
	75	5	
	other	7	
DSC	METAIV	5	5
EAI	680	9	14
	other	5	
GAM	16	14	35
	18	21	
GEC	772	5	9
	other	4	
HAR	1200	8	37
	6024	15	
	other	14	
HEP	2000	53	185
	21MX	11	
	2100	26	
	2108	9	
	2116	17	
	21XX	16	
	3000	34	
	9830	5	
	other	14	
HON	516	7	76
	2020	13	
	20XX	10	
	61XX	4	
	60/XX	9	
	other	33	
IBM	SYS3	31	756
	SYS7	6	
	SYS10	37	
	SYS32	12	
	1130	130	
	1401	12	
	1620	18	
	1800	14	
	20XX	7	
	31XX	17	
	37XX	7	
	5100	12	
	70XX	5	
	360/20	36	
	360/22	9	
	360/30	52	
	360/40	48	
	360/44	6	
	360/50	18	
	360/65	17	
	360/67	7	
	360/75	6	
	360/91	8	
	360/XX	10	
	370/115	17	
	370/125	31	
	370/135	35	
	370/138	24	
	370/145	33	
	370/148	16	
	370/155	10	
	370/158	44	
	370/168	8	
	370/XX	4	
	other	9	
INT	7/16	10	42
	7/32	11	
	8/32	5	
	other	16	
MIC	1600	7	7
MID	1621	4	4
MOD	COMP	6	6
MOS	KIMI	12	12
NCR	100	14	68
	101	17	
	151	6	
	200	10	
	399	6	
	other	15	
NIC	misc	7	7
OLI	misc	4	4
PRI	300	17	27
	400	6	
	other	4	
PRT	SOL/703	6	6
RAY	704	5	5
SEL	misc	4	4
TEK	40XX	10	10
TXI	960	4	14
	980	8	
	other	2	
UNI	1004	8	90
	1106	14	
	1108	9	
	1110	8	
	70/XX	12	
	90/XX	10	
	9200	4	
	9300	8	
	misc	17	
VAR	620	30	37
	other	7	
WAN	2200	22	28
	other	6	
XDS	SIGMA5	5	54
	SIGMA6	9	
	SIGMA7	8	
	SIGMA9	8	
	530	8	
	560	6	
	other	10	
4PH	misc	4	4
other	misc	86	86
Total Reported			3013
Estimated Population Total			5182

Table II-2

Estimates of Numbers of Institutions with access to Computers by Type of Control, Highest Level of Offering and Enrollment Class

June 30, 1977

Group	Insts.	# Insts. with access to Computers	% with access to Computers
Public Associate Below 500	52	17	33
500 -- 2,499	448	310	69
2,500 -- 9,999	332	322	97
10,000 -- 19,999	82	80	98
20,000 and above	23	22	96
Bachelor's Below 500	4	0	0
500 -- 2,499	55	51	93
2,500 -- 9,999	36	36	100
10,000 -- 19,999	2	2	100
20,000 and above	0	--	--
Master's Below 500	11	7	64
500 -- 2,499	39	38	97
2,500 -- 9,999	172	167	97
10,000 -- 19,999	37	35	95
20,000 and above	9	9	100
Doctorate Below 500	2	2	100
500 -- 2,499	28	28	100
2,500 -- 9,999	43	42	98
10,000 -- 19,999	63	52	83
20,000 and above	71	67	94
Private Associate Below 500	161	14	9
500 -- 2,499	90	34	38
2,500 -- 9,999	8	2	25
10,000 -- 19,999	0	--	--
20,000 and above	0	--	--
Bachelor's Below 500	222	55	25
500 -- 2,499	458	330	72
2,500 -- 9,999	24	22	92
10,000 -- 19,999	0	--	--
20,000 and above	0	--	--
Master's Below 500	137	26	19
500 -- 2,499	220	166	76
2,500 -- 9,999	89	87	98
10,000 -- 19,999	3	3	100
20,000 and above	0	--	--
Doctorate Below 500	73	11	15
500 -- 2,499	44	34	77
2,500 -- 9,999	71	65	92
10,000 -- 19,999	18	18	100
20,000 and above	9	9	100
	3,136	2,163	69

Table II-3
Estimates of Numbers of Institutions with access to Computers by Enrollment Class
June 30, 1977

Fall 1968 Enrollment Class	Fall '75 Enrollment (millions)	Total # Inst's.	# Inst's. with access to Computers	% with access to Computers
Below 500	.2	662	132	20
500-2,499	1.8	1382	991	72
2,500-9,999	3.9	775	743	96
10,000-19,999	2.7	205	190	93
20,000 and above	2.7	112	107	96
Total	11.2	3136	2163	69

Table II-4
Estimates of Numbers of Institutions with access to Computers by Highest Level of Offering
June 30, 1977

Highest Level of Offering	Fall '75 Enrollment (millions)	Total # Inst's.	# Inst's. with access to Computers	% with access to Computers
Associate	4.0	1196	801	67
Bachelor's	.9	801	496	62
Master's	2.4	717	538	75
Doctorate	3.9	422	328	78
Total	11.2	3136	2163	69

Table II-5
Estimates of Numbers of Institutions with access to Computers by Type of Control
June 30, 1977

Type of Control	Fall '75 Enrollment (millions)	Total # Inst's.	# Inst's. with access to Computers	% with access to Computers
Public	8.8	1509	1287	85
Private	2.4	1627	876	54
Total	11.2	3136	2163	69

Table II-6

Estimated Number of U.S. Institutions of Higher Education with Access to Computer Facilities

	No. Institutions		
	With Access to Computers	Without Access to Computers	TOTAL
SREB/NSF 1964-65 Survey June 30, 1965	707	1512	2219
SREB/NSF 1966-67 Inventory June 30, 1967	980	1497	2477
SREB/NSF 1969-70 Inventory June 30, 1970	1681	1126	2807
FICHE/NSF 1976-77 Inventory June 30, 1977	2163	973	3136

Table II-7

Estimated Numbers of Students Enrolled at Institutions with No Access to Computer Facilities

	No. Institutions	No. Students (Millions)
1964-65	1512	2.4
1966-67	1497	1.6
1969-70	1126	.8
1976-77	973	1.3

4. Listing of Computers by Installation within Institution within State

The lists contained in the following pages are self-explanatory except for the DC column. A "-" in this column indicates that the computer on that line is directly coupled with the computer immediately below it. A "T" indicates that that computer is used primarily as a terminal.

The year of installation was not reported in some instances.

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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                  CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                             UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

         LISTING OF COMPUTERS BY INSTALLATION WITHIN INSTITUTION WITHIN STATE                    PAGE II-06

                                                           QTY MFGR MODEL  DC  YR INSTAL

             ALABAMA
                  MONTEVALLO, UNIVERSITY OF
                            COMPUTER CENTER                 1 BUR 1700          1976
                  ALABAMA STATE UNIVERSITY
                            COMPUTER CENTER                 1 IBM 370/115       1976
                  NORTH ALABAMA, U OF
                            COMPUTER CENTER                 1 IBM SYS3          1972
                  GADSDEN STATE JR COLLEGE
                            DIR OF COMPUTER CTR             1 IBM SYS3/10       1973
                  HUNTINGDON COLLEGE
                            COMPUTER CENTER                 1 HON 1642          1972
                  JACKSCNVL ST UNIVERSITY
                            DATA PROCESSING DEPARTMENT      1 IBM 370/138       1977
                  JEFFERSON ST JR COLLEGE
                            COMPUTER CENTER                 1 IBM 3115          1974
                  JUDSON COLLEGE
                            COMPUTER CENTER                 1 IBM 1130          1967
                  LIVINGSTON UNIVERSITY
                                                            1 UNKNOWN
                  NTHEST ALA ST JR COLLEGE
                            REGISTRAR                       1 UNI 9200          1975
                                                            1 GAP SPC16         1976
                  SAMFORD UNIVERSITY
                            COMPUTER SERVICES               1 XDS SIGMA6        1903
                  STILLMAN COLLEGE
                            MATHEMATICS DEPT                1 UNI 1004     T    1974
                  TALLADEGA COLLEGE
                            COMPUTER CENTER                 1 DEC PDP1140       1975
                  TROY ST U DOTHN-FTRUCKER
                                                            1 UNKNOWN
                  TROY STATE U MONTGOMERY
                                                            0 UNKNOWN
                  ALABAMA IN BIRMINGHAM U OF
                            CENTRAL COMPUTING FACILITY      1 IBM 370/158       1973
                            PHYSICS DEPARTMENT              1 PRI 400           1976
                  UNIV. OF ALABAMA IN HUNTSVILLE
                            UAH COMPUTER SERVICES           1 UNI 1110          1976
                  SOUTH ALABAMA, U OF
                            UNIV COMPUTER CENTER            1 IBM 370/145       1976
                                                            1 VAR V73           1973
                  AUBURN U AT MONTGOMERY
                            COMPUTER CENTER                 1 IBM 1130     T    1975
                                                            0 IBM 370/158
                                                            0 HEP 2000
                  LURLEEN B WALLACE ST JC
                            DATA PROCESSING                 1 IBM
                  WALLACE COMMUNITY COLLEGE
                            BUSINESS OFFICE                 1 NCR 499           1976
                  CHATTAHOOCHEE VALLEY CC
                            DIVISION OF DATA PROCESSING     1 BUR 1700          1975
             ALASKA
                  UNIVERSITY OF ALASKA, SOUTHEAS
                            COMPUTER CENTER, JUNEAU         1 HON 6/06     T    1977
             ARIZONA
                  COCHISE COLLEGE
                            COMPUTER CENTER                 1 NCR 101           1974
                  EASTERN ARIZONA COLLEGE
                                                            1 IBM SYS3/8
                  GRAND CANYON COLLEGE
                            COMPUTER SERVICES               1 GEC GE235         1976
                                                            1 DEC PDP1134       1977
                                                            0 UNI 1108
                  GLENDALE CMTY COLLEGE
                            BUSINESS DEPARTMENT             0 UNI 1106          1971
                                                            0 HEP 2000          1974
                  MESA COMMUNITY COLLEGE
                            BUSINESS DEPARTMENT             0 UNI 1106          1971
                                                            0 HEP 2000          1974
                  PHOENIX COLLEGE
                            BUSINESS DEPARTMENT             0 UNI 1106          1971
                                                            0 HEP 2000          1974
                  YAVAPAI COLLEGE
                            COMPUTER SERVICES               1 DEC 10            1971
                                                            1 DEC PDP1134  -    1973
                                                            1 DEC PDP8E    -    1972
                  ARIZONA STATE UNIVERSITY
                            CHEMICAL ENGINEERING            1 DEC PDP1120       1970
                            COMPUTER SERVICES               1 UNI 1100/42       1972
                                                            2 DEC PDP1170       1977
                            DEPT OF CHEMISTRY               1 DAG 4000     T    1971
                                                            1 DAG NOV1200  T    1975
                                                            1 DEC PDP8E    T    1972
                                                            1 DEC PDP8E         1971
                                                            1 DEC PDP8E         1971
                                                            1 DAG NOV1220       1973
                                                            1 DAG NOVA3    T    1976
                            DEPT OF PHYSICS                 1 DEC PDP1120  T    1972
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                                          QTY MFGR MODEL  DC  YR INSTAL

ARIZONA                (CONTINUED)
             DEPT OF PSYCHOLOGY            1 DEC PDP8           1969
                                           2 DEC PDP15          1970
                                           3 DEC LSI11          1976
                                           1 DEC PDP1105        1975
                                           1 DEC PDP1134        1977
                                           2 ACS 1800E          1973
                                          12 MOS KIM1           1976
             ELEC & COMP ENGINEERING       1 VAR 620            1966
                                           1 UNI 1218           1976
             ELECTRONICS DEPT              1 DEC PDP1110        1974
                                           2 DEC PDP1105        1976
             MECHANICAL ENGR.              1 DAG NOVA      T    1977
             MUSIC EDUCATION LAB           1 DEC PDP8           1975
             UNIVERSITY TESTING SERVICES   2 OTH 8519           1977
    NORTHERN ARIZ UNIVERSITY
             COLLEGE OF ENGINEERING        1 XDS 530            1976
                                           1 DEC PDP8I          1968
             COMPUTER SERVICES             1 XDS SIGMA6         1972
    ARIZONA, UNIVERSITY OF
             CHEMISTRY                     1 DAG NOVA2
             CHEMISTRY DEPT                1 SAN 2115A     T    1968
             CHEMISTRY/ANALYTICAL          1 HEP 2100A          1972
                                           1 HEP 2100A          1973
             COMP SYS & BIOSTATISTICS      1 DEC PDP20          1977
                                           2 DEC PDP12          1971
                                           1 DEC PDP1140        1975
                                           1 DEC PDP1170        1977
             COMPUTING CENTER              1 CDC CYB175         1977
                                           2 DEC KL10           1976
             DEPT OF RADIOLOGY             1 DEC PDP1170        1975
                                           1 DEC PDP1140        1975
                                           1 DEC PDP1134        1976
             DEPT SPEECH & HEARING SCI     1 DAG NOVA3     -    1977
             DIV. OF RESPIRATORY SCIENCES  1 INT 7/16           1975
             ECOL AND EVOL. BIOLOGY        0 CDC CYB175
                                           0 DEC PDP1090
                                           1 DEC CLASSIC
             ELECTRICAL ENGINEERING        1 INT                1975
                                           1 SICPAC             1974
                                           1 DEC GT44           1975
             IGEL AEROSPACE                1 DEC PDP8I
                                           1 DEC PDP1576        1971
             MATHEMATICS DEPT              1 IBM 1130           1966
             OPTICAL SCIENCES CENTER       1 DAG S/230          1976
                                           1 DEC PDP1110        1975
                                           1 HEP 2115A          1971
                                           1 MCC COMP II        1974
             PHYSICS                       1 INT 7/16           1974
                                           1 WES1               1968
                                           1 INT 6/16           1977
             PHYSICS DEPT                  1 DAG NOVA2          1976
                                           1 DEC PDP8E          1975
                                           1 HEP 2115           1972
             PHYSIOLOGY                    1 DEC PDP8E          1972
                                           1 INT 80             1976
             PLANETARY SCIENCES            1 DEC PDP1140        1974
             PSYCHOLOGY DEPT               1 DAG NOVA           1977
             RADIATION ONCOLOGY            2 DEC PDP8E          1975
             REAL-TIME COMP LAB            1 DEC PDP9           1967
                                           1 GAM SPC16          1976
             SYSTEMS & IND. ENGR.          1 DEC PDP11          1976
             SYSTEMS AND INDUSTRIAL ENG.   1 DEC PDP8E          1971
             VAN DE GRAAFF LAB             1 DAG NOV1200        1971
    PIMA COMMUNITY COLLEGE
             COMPUTER SERVICES             1 DEC PDP1055   -    1973
                                           0 UNKNOWN            1976
    CENTRAL ARIZONA COLLEGE
             COMPUTER SERVICES             1 DEC KA10           1975
    MARICOPA TECH CC
             BUSINESS DEPARTMENT           0 UNI 1106           1971
                                           0 HEP 2000           1974
    SCOTTSDALE CMTY COLLEGE
             DATA PROCESSING DEPT          0 UNI 1106           1971
                                           0 HEP 2000           1974
    NORTHLAND PIONEER COLLEGE
             YAVAPAI COLL COMP SERVICES    1 DEC PDP1170        1977
                                           1 DEC 10
ARKANSAS
    ARKANSAS-MONTICELLO, U OF
             UAM COMPUTER CENTER           0 IBM 370/155
                                           1 IBM 3780      T    1973
    ARKANSAS PINE BLUFF, U OF
             COMPUTER CENTER               1 IBM 1130      T    1969
    ARKANSAS COLLEGE
             DATA PROCESSING CENTER        1 IBM SYS3           1975
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                                                  QTY MFGR MODEL  DC  YR INSTAL

   ARKANSAS                (CONTINUED)
       ARKANSAS TECH UNIVERSITY
                 BUSINESS OFFICE                   1 NCR 399            1972
                 COMPUTER SCIENCE DEPARTMENT       1 IBM 1130      T    1971
                 PHYSICAL SCIENCES DEPT            1 WAN 700-6          1968
       ARKANSAS STATE U MAIN CAM
                 ASU COMPUTER SERVICES             1 IBM 360/30         1966
                                                   1 HAR 220       T    1976
                                                   1 DAG NOVA3     T    1975
       JOHN BROWN UNIVERSITY
                 DIV OF NATURAL SCIENCE            1 DAG NOVA3          1976
       ARK AT LITTLE ROCK, U OF
                 UALR COMPUTER CENTER              1 HON 6031           1976
                                                   1 HON 725G      T    1976
       STHN ARK U MAIN CAMPUS
                 DATA COMPUTER CENTER              1 IBM 1130           1969
       ARKANSAS MAIN CAMPUS, U OF
                 COMPUTING SERVICES                1 IBM 370/155        1974
       ARK MEDL SCI CAMPUS, U OF
                 COMPUTING FACILITY                1 DEC 10             1974
       HARDING GRAD SCH RELIGION
                                                   0 DEC PDP1145
       HARDING COLLEGE MAIN CAM
                 HARDING COLLEGE COMP CENTER       1 DEC PDP1145        1975
   CALIFORNIA
       BIOLA COLLEGE
                 COMPUTER SERVICES                 1 GAM 18/30          1972
       CABRILLO COLLEGE
                 DATA PROCESSING DEPARTMENT        1 DAG C/300     T    1976
                                                   0 AMD 470V/6
                                                   0 DEC PDP1145
                                                   0 IBM 360/40
       CAL INST OF TECHNOLOGY
                 W H BOOTH COMPUTING CENTER        1 IBM 370/158        1973
                                                   1 DEC 10             1970
       CAL STATE U-FULLERTON
                 COMPUTER CENTER                   1 CDC 3150           1970
                                                   1 DEC PDP1140        1973
                                                   1 DEC PDP1145        1976
       CAL STATE U-LONG BEACH
                 DATA PROC & INFO SYSTEMS          1 CDC 3150           1971
                                                   1 DEC PDP1145        1975
       CAL POLY ST U-SN LUIS OB
                 COMPUTER CENTER                   1 IBM 360/50         1977
                                                   1 DEC PDP1145        1975
                                                   1 DEC PDP1135        1975
                                                   0 CDC 3170
                                                   0 CDC 3300
                                                   0 CDC 3171
                                                   0 CDC CYB173
       CAL STATE POLY U-POMONA
                 COMPUTER CENTER                   1 CDC 3150      T    1970
                                                   1 DEC PDP1145        1976
                                                   0 CDC 3300      -    1970
                                                   0 CDC 3170           1973
                                                   0 CDC CYB173         1975
       CAL STATE U-CHICO
                 COMPUTER CENTER                   1 CDC 3150           1969
                                                   1 DEC PDP1145        1976
                                                   2 CDC 3300           1968
                                                   1 CDC CYB173         1976
                 DEPARTMENT OF COMPUTER SCIENCE    1 HEP 2100           1972
                                                   1 HEP 21-MX          1975
                                                   1 VAR V72            1974
                                                   1 CDC 1830TS         1977
       CAL STATE U-FRESNO
                 CTR FOR INFORMATION PROC.         1 CDC 3150      T    1969
                                                   1 CDC 3300           1967
                                                   1 CDC CYB173         1975
                                                   1 DEC PDP1145        1977
                                                   1 TEK 4051           1977
       HUMBOLDT STATE U
                 COMPUTER CENTER                   1 CDC 3150           1970
                                                   1 DEC PDP1145        1975
                                                   1 DEC PDP1103        1977
                                                   1 CDC 160A      T    1976
                                                   0 CDC CYBER
                                                   0 CDC 3300
                                                   0 CDC 3170
       CHABOT COLLEGE
                 DATA PROCESSING CENTER            1 DEC KA10           1975
       CHAFFEY COLLEGE
                 DATA PROCESSING CENTER            1 BUR 2520           1970
       CHAPMAN COLLEGE
                 DATA PROCESSING CENTER            1 NCR 101            1973
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                                                 QTY MFGR MODEL   DC  YR INSTAL

  CALIFORNIA             (CONTINUED)
       CITRUS COLLEGE
               COMPUTING INFORMATION SYSTEMS      1 XDS 560             1975
       CITY COLLEGE SN FRANCISCO
               COMPUTER SERVICES                  1 HON 6023            1975
       CLAREMONT MEN'S COLLEGE
               MATHEMATICS                        0 DEC 10
       THE CLAREMONT COLLEGES
               SEAVER COMPUTER CENTER             1 IBM 360/40          1965
                                                  1 DEC 10              1971
                                                  1 UNI 1900            1975
       COGSWELL COLLEGE
               ACADEMIC AFFAIRS                   1 DAG NOVA            1975
       NOTRE DAME, COLLEGE OF
               MATHEMATICS                        1 OTH 816       T     1977
                                                  0 IBM 370/168
       DESERT, COLLEGE OF THE
               CCMPUTER SERVICES                  1 HEP 3000            1975
                                                  1 IBM 1130            1965
       SISKIYOUS, COLLEGE OF THE
               INFORMATICN PROCESSING             1 IBM 1130            1970
                                                  1 DAG NOV1220         1975
       COMPTON CMTY COLLEGE
               DATA PROCESSING SERVICES           1 HEP 3000            1976
       CONTRA COSTA COLLEGE
               DATA PROCESSING                    1 IBM SYS3/10         1973
                                                  1 HEP 2000F           1974
       DIABLO VALLEY COLLEGE
               COMPUTER SCIENCE DEPT              1 IBM SYS3            1973
                                                  1 HEP 2000F           1973
       DOMINICAN C OF SAN RAFAEL
               DEPT OF MATHEMATICS                0 UNKNOWN
       FOOTHILL COLLEGE
                                                  1 HEP 2000G
                                                  1 DEC PDP8
       GAVILAN COLLEGE
               NATURAL SCIENCE DIVISION           1 HEP 2100            1976
       GOLDEN GATE UNIVERSITY
               INFORMATION SCIENCE                1 BIT 3000            1973
                                                  0 UNI 70
                                                  0 AMD 470V/6
       GRADUATE THEOL UNION
               COMPUTER SERVICE CENTER            1 BIT 4000/15         1977
       HARTNELL COLLEGE
               DATA PROCESSING DEPT               1 IBM 360/30          1973
       LASSEN COLLEGE
               BUSINESS OFFICE                    1 IBM SYS3            1976
       LONG BEACH CITY  COLLEGE
               MATH-SCIENCE COMPUTER LAB          1 DEC PDP11           1976
               DATA PROCESSING SERVICES           1 UNI 90/60           1927
                                                  1 IBM 360/30          1968
       LOS ANG VALLEY COLLEGE
               ADMINISTRATIVE SERVICES            0 UNKNOWN
               INSTRUCTION                        1 XDS 530A            1975
       LOS ANG C OF CHIROPRACTIC
               DIR. OF RESEARCH & ANALYSIS        1 ADM 100             1976
       LOS RIOS CC SYSTEM OFF
               DATA PROCESSING DEPT               1 IBM 360/30          1967
       MERCED COMMUNITY COLLEGE DIST
               DATA PROCESSING CENTER             1 XDS 560             1975
       MIRA COSTA COLLEGE
               DATA PROCESSING                    1 HEP 3000II          1977
       MONTEREY PEN COLLEGE
               CCMPUTER CENTER                    1 BUR 1726      -     1974
                                                  1 GAM SPC16           1974
       MOUNT SNT MARY'S COLLEGE
               OFFICE OF INSTITUTIONAL RES.       1 OTH 80              1976
                                                  0 HON 2200
                                                  0 IBM SYS32
                                                  0 IBM 370/158
       MOUNT SAN ANTONIO COLLEGE
               COMPUTER SERVICES                  1 IBM 370/135         1972
       PACIFIC COLLEGE
               MATH DEPT                          1 WAN 2200-8    T     1974
       PACIFIC SCHCOL OF RELIGION
                                                  0 BIT 4000/15
       PALCMAR COLLEGE
               DATA PROCESSING                    1 UNI 70/7            1975
       POINT LOMA COLLEGE
               MATHEMATICS DEPT                   1 GAM 16/440          1977
                                                  1 GAM 16/440          1977
                                                  0 HEP 2000            1975
       PEPPERDINE UNIVERSITY
               PEPPERDINE UNIV COMP SERVICES      1 UNI 90/60           1977
                                                  1 UNI 1004      T     1977
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                                              QTY MFGR MODEL  DC  YR INSTAL

CALIFORNIA             (CONTINUED)
   PERALTA COMM COLL DIST
           PERALTA COLLEGES DATA PROC CTR   1 IBM 370/135 -     1972
   RIO HONDO COLLEGE
           COMPUTER CENTER                  1 IBM 360/22        1972
   SAN DIEGO CC CEN OFFICE
           DATA SYSTEMS                     0 IBM 370/145
                                            0 IBM 370/135

   LONE MOUNTAIN COLLEGE
                                            0 UNKNOWN

   SAN JOAQUIN DELTA COLLEGE
           COMPUTER SERVICES                1 DEC KA10          1973
   SAN JOSE CITY COLLEGE
                                            1 DEC PDP11
                                            0 DEC PDP11
                                            0 IBM 370/135
                                            2 HEP 2114
                                            4 HEP 2116
   SANTA ANA COLLEGE
           COMPUTER CENTER                  1 BUR 2700          1967
   SANTA BARBARA CTY COLLEGE
           DATA PROCESSING DEPARTMENT       1 BUR 3506          1971
                                            1 BUR 1712     T    1974

   SHASTA COLLEGE
           DATA PROCESSING                  1 IBM SYS3/10       1972
                                            1 IBM 1131          1972

   SIERRA COLLEGE
           COMPUTING SERVICES               1 HEP 2000G         1977
                                            1 NCR 100           1973
                                            1 BUR 6805          1977

   STANFORD UNIVERSITY
           ARTIFICIAL INTELLIGENCE PRO      1 DEC KL10          1976
                                            1 DEC KA10          1968
                                            1 DEC PDP6          1966
                                            1 DEC PDP1145       1974
           GSB COMPUTER FACILITY            1 HEP 21-MX         1976
                                            1 HEP 21-MX         1976

           LOTS COMPUTER FACILITY           1 DEC PDP2040       1976
           MISC                             7 DEC PDP1145
                                            1 DEC PDP1105
                                            1 DEC PDP1155
                                            1 DEC PDP1150
                                            2 DEC PDP1103
                                            1 DEC PDP1104
                                            2 HEP 2115
                                            3 HEP 2114
                                            1 INT 74
                                            7 HEP 2100
                                            1 HEP 9830A
                                            5 HEP 2108
                                            1 HEP 21-MX
                                            4 HEP 2116
                                            3 HEP 2109
                                            1 HEP 2113
                                            3 HEP 2112
                                            1 HEP 2124
                                            2 DAG NOVA2
                                            1 DAG NOVA820
                                            2 DAG NOV1200
                                            2 DAG NOVA3
                                            2 DAG NOVA840
                                            1 DAG S/230
                                            1 DAG NOVA3
                                            1 DAG NOV1220
                                            1 XDS SIGMA5
                                            1 XDS SIGMA3
                                            1 IBM 5100
                                            1 IBM SYS32
                                            3 VAR 620I
                                            1 VAR 620F
                                            1 HON 516
                                           13 DEC PDP1134
                                            9 DEC PDP1120
                                           38 DEC PDP8
                                            4 DEC PDP9
                                            5 DEC PDP12
                                            5 DEC PDP1140
                                            1 DEC PDP7
                                            8 DEC PDP1110
           SCI CAMPUS FACILITY              1 IBM 370/168       1975
           SCI SLAC FACILITY                2 IBM 370/168       1974
                                            1 IBM 360/91        1968
           SIGMA 5 COMPUTER                 1 XDS SIGMA5        1969
                                            3 DAG NOVA2         1975
                                            1 HEP 2115     T    1973
                                            0 CDC 7600
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                                              QTY MFGR MODEL  DC  YR INSTAL

CALIFORNIA          (CONTINUED)
     STATE CENTER CC SYS OFF
               C P DEPT                         1 HON 2040          1974
     REEDLEY COLLEGE
                                                1 HEP               1974
                                                0 UNKNOWN
     TAFT COLLEGE
               MATHEMATICS DEPARTMENT           1 DEC PDP8E         1974
     CAL SYSW ADMIN CEN OFF U
               INFORMATION SYS & COMPUTING      1 IBM 360/65        1969
                                                1 IBM 360/40        1964
                                                2 IBM 360/30        1963
     U OF CAL-IRVINE
               COMPUTER FACILITY                1 XDS SIGMA7        1969
                                                1 DEC 10            1969
                                                1 DEC PDP1145       1974
                                                1 HEP 2116
                                                0 DEC PDP11
                                                0 VAR 620
                                                0 LCC SUE
     CAL-LOS ANGELES, U OF
               CAMPUS COMPUTING NETWORK         1 IBM 360/91        1969
               HEALTH SCIENCES COMPUTING FAC.   1 IBM 360/91        1968
     CAL-RIVERSIDE, U OF
               CAMPUS COMPUTING CENTER          1 IBM 360/50        1968
                                                1 HEP 3000          1975
                                                1 PRI 400           1977
     CAL-SAN DIEGO, U OF
               COMPUTER CENTER                  1 BUR 6700          1970
                                                1 CCC 3600          1964
               MYOCARDIAL INFARC RESCH UNIT     1 XDS SIGMA3        1970
               PHYSICS MASEK GROUP              1 DSC METAIV        1970
               PICCIONI HIGH ENERGY PHYSICS     1 DEC PDP8          1968
                                                1 DEC PDP8
               SHIPBOARD COMPUTER GROUP         1 IBM 1800          1966
                                                1 IBM 1800          1968
                                                1 IBM 1800          1969
                                                1 IBM 1800          1970
                                                2 HEP 2108          1976
     CAL-SAN FRANCISCO, U OF
               COMPUTER CENTER                  1 DEC PDP7
                                                5 DEC PDP8
                                               11 DEC PDP11
                                                2 DEC PDP12
                                                2 DEC PDP15
                                               12 DAG NOVA
                                                4 DAG ECLIPSE
                                                3 MCD COMPIV
                                                1 IBM 370/145       1975
                                                1 4PH
     CAL-SANTA BARBARA, U OF
               COMPUTER CENTER                  1 IBM 360/20        1969
                                                1 IBM 360/75        1969
                                                1 DEC PDP1145       1975
     CAL-SANTA CRUZ, U OF
               COMPUTER CENTER                  1 IBM 360/40        1968
                                                1 DEC PDP1145       1972
                                                2 BUR 5500          1976
     SOUTHERN CALIFORNIA, U OF
               IMAGE PROCESSING INSTITUTE       1 DEC KL10          1971
                                                1 HEP 2100A         1971
                                                1 DEC PDP1140       1976
               KECK MANAGEMENT SCI CENTER       1 HEP 2100          1972
                                                1 HEP 2100          1972
               UNIVERSITY INFORMATION PROC      1 IBM 370/158       1973
     PACIFIC, UNIVERSITY OF THE
               BUSINESS OFFICE                  1 BUR 6700          1973
     WEST COAST L MAIN CAMPUS
               COMPUTER LABORATORY              1 VAR V72           1975
     W COAST U ORANGE CO CTR
               COMPUTER LABORATORY              1 IBM 1130          1970
     WEST VALLEY COLLEGE
               DATA PROCESSING DEPT             1 IBM 370/135 -     1975
     WESTMONT COLLEGE
               ACADEMIC COMPUTER                1 DEC PDP1110       1975
     WHITTIER COLLEGE
               MATH DEPT                        1 IBM 1130          1968
     SN FRISCO CC CTRS SYS
                                                0 HON 6000
     YOSEMITE COMMUNITY COLLEGE DIS
               DATA PROCESSING                  1 BUR 1728          1975
     SKYLINE COLLEGE
               MEDIA CENTER                     1 HEP 2000E         1974
     CAL ST COLLEGE-BAKERSFLD
               ADP                              1 DEC PDP1145       1975
                                                0 OTH
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LISTING OF COMPUTERS BY INSTALLATION WITHIN INSTITUTION WITHIN STATE

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                                              QTY MFGR MODEL  DC  YR INSTAL

CALIFORNIA               (CONTINUED)
    COAST CC SYSTEM OFFICE
             INFORMATION SERVICES               1 IBM 370/145        1976
                                                1 IBM 370/155        1972
    ALAMEDA, COLLEGE OF
                                                0 UNKNOWN
    SADDLEBACK CMTY COLLEGE
             COMPUTING CENTER                   0 UNI 1100           1976
                                                1 UNI 700            1977
                                                1 DAG NOVA           1969
                                                1 KER IDS16          1976
    WEST LOS ANGELES, U OF
             BUSINESS OFFICE                    1 BA4 350            1975
    AMERICAN RIVER COLLEGE
             DATA PROCESSING DEPT               1 IBM 1620           1961
                                                1 DEC PDP1170        1976
    JESUIT SCHOOL OF THEOLOGY
                                                0 BIT 4000/15
    SAN DIEGO, UNIVERSITY OF
                                                0 HEP 2000
             DATA PROCESSING                    1 NCR 151            1976
             MATH & SCIENCE DEPT                1 IMS 8080           1977
    WSTN ST U C LAW CEN OFF
             DATA PROCESSING                    1 IBM360/20          1975
             COMPUTER RESEARCH                  0 IBM 360/20
    NATIONAL UNIVERSITY
             COMPUTER CENTER                    1 IBM 370/115        1977
COLORADO
    COLORADO COLLEGE
             COMPUTER CENTER                    1 HEP 2000           1971
    COLORADO SCHOOL OF MINES
             COMPUTING CENTER                   1 DEC 10             1970
    COLORADO STATE UNIVERSITY
             UNIVERSITY COMPUTER CENTER         1 CDC CYB172         1976
                                                1 CDC CYB171         1977
    FORT LEWIS COLLEGE
             COMPUTER CENTER                    1 IBM 360/30         1971
    LAMAR COMMUNITY COLLEGE
             DATA PROCESSING DEPT               1 DEC PDP1140 T      1977
    MESA COLLEGE
             DATA PROCESSING DEPARTMENT         1 IBM 360/22         1975
                                                1 DAG NOVA3          1975
    NORTHEASTERN JR COLLEGE
             SCIENCE DEPARTMENT                 1 CDC 6400           1971
    OTERO JUNIOR COLLEGE
             COMPUTER CENTER                    1 IBM 1620           1962
                                                1 DEC PDP11          1977
    TRINIDAD STATE JR COLLEGE
             DATA PROCESSING DEPARTMENT         1 IBM 1401           1964
                                                1 IBM 1401           1975
                                                1 CDC 200            1973
                                                0 CDC 6400
    COLORADO AT BOULDER, U OF
             COMPUTING CENTER                   1 CDC 6400           1967
                                                1 CDC 6400           1971
                                                1 MCC COMPII         1976
    DENVER, UNIVERSITY OF
             COMPUTING SERVICES                 1 BUR 6700           1973
    WESTERN ST COLLEGE COLO
             DATA PROCESSING                    1 IBM 360/30         1976
    COLO MEDICAL CENTER, U OF
             BIOMETRICS-SCI COMP CNTR           0 UNKNOWN
             CENTRAL LABORATORY                 1 IBM 1800           1967
             COMPUTER SERVICES                  1 IBM 3148           1977
                                                1 HAR 1620      T    1976
    COLO MTN COLLEGE CEN OFF
             CENTRAL DATA PROC DEPT             1 HCN 62/40          1976
    COLO CENTRAL OFFICE, U OF
             CONSOLIDATED ADMIN DATA PROC       1 IBM 370/145        1973
    EL PASO COMMUNITY COLLEGE
             DATA PROCESSING                    1 IBM 360/40         1976
    DENVER CENTRAL OFF, CC OF
             ADP DIVISION                       0 IBM 370/148
                                                0 CDC SPECTRA
CONNECTICUT
    ANNHURST COLLEGE
             MATHEMATICS DEPARTMENT             1 DEC PDP8           1973
    BRIDGEPORT ENGR INSTITUTE
                                                0 UNKNOWN
    CENTRAL CONN ST COLLEGE
             COMPUTATION CENTER                 1 IBM 360/25    T    1970
                                                1 HAR 1600      T    1975
    CONNECTICUT COLLEGE
             COMPUTER CENTER                    1 IBM 1130           1971
    FAIRFIELD UNIVERSITY
             EDUCATIONAL RESEARCH & DEV         1 DSC METAIV         1977
                                                1 IBM 1500           1968
                                                1 DEC 680I           1969
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                                                 QTY MFGR MODEL  DC  YR INSTAL

CONNECTICUT            (CONTINUED)
    MANCHESTER CMTY COLLEGE
                DATA PROCESSING DEPT              1 BUR 771           1975
    MITCHELL COLLEGE
                                                  1 WAN 2200          1977
    NEW HAVEN, UNIVERSITY OF
                COMPUTER CENTER                   1 DSC METAIV        1976
                                                  1 DSC METAIV        1978
    POST CCLLEGE
                                                  0 UNKNOWN
    QUINNIPIAC COLLEGE
                COMPUTER CENTER                   1 DAG NOVA2         1974
    THAMES VLY STATE TECH C
                DATA PROCESSING                   1 IBM 1130          1972
                                                  1 DAG NOVA2         1974
                                                  3 MCT KIM-3         1977
    TRINITY COLLEGE
                ENGINEERING                       1 DEC PDP11         1976
                                                  1 DEC PDP8          1966
                                                  0 HON DTSS
                                                  0 IBM 370/
                                                  1 DEC PDP11         1977
                                                  1 TXI 980A          1976
    CONN MAIN CAMPUS, U OF
                NEW ENGLAND RES APPL CNT          1 IBM 370/145       1977
    CONN HARTFORD U OF
                                                  0 UNKNOWN
    CONN WATERBURY, U OF
                                                  0 UNKNOWN
    HARTFORD, UNIVERSITY OF
                DATA PROCESSING & SYSTEMS         1 NCR 200           1970
                DANA COMPUTER CENTER              1 DAG S/200         1975
    WESLEYAN UNIVERSITY
                COMPUTING CENTER                  1 DEC PDP1040       1972
                                                  1 DEC GT40          1974
    MATTATUCK CMTY COLLEGE
                ACADEMIC COMPUTER SERVICES        1 DEC PDP1134       1977
    GREATER HARTFORD CC
                COMPUTER CENTER                   0 IBM 360/65
                                                  0 IBM 370/155
                                                  1 IBM 1130    T     1970
    CONN HEALTH CENTER, U OF
                DATA SERVICES DIVISION            1 UNI 1106          1973
DELAWARE
    DELAWARE STATE COLLEGE
                COMPUTER CENTER                   1 IBM 1130          1966
                                                  1 PRI 300           1976
                                                  1 DEC
    WESLEY COLLEGE
                COMPUTER CENTER                   0 UNKNOWN
    DELA TECH & COM COLLEGE, SOUTH
                DATA PROCESSING DEPT              1 IBM 360/30        1974
    DELAWARE TECH & COMM COLL
                COMPUTER SERVICES                 0 DEC PDP1170
                                                  0 DEC 10
                                                  0 HEP 2000
                                                  0 BUR 7700
    DEL TECH & CC STANTON CAMPUS
                STUDENT SERVICES DIVISION         0 UNKNOWN
DISTRICT OF COLUMBIA
    CATHOLIC U OF AMERICA
                CATHOLIC UNIV COMPUTING CENTER    1 DEC 10            1977
                                                  1 DEC PDP11   T     1972
                                                  1 DEC PDP11         1976
                                                  1 DEC PDP8          1975
    GALLAUDET COLLEGE
                COMPUTER CENTER                   1 DEC KL10          1976
    GEORGE WASH UNIVERSITY
                CTR ACAD. ADMIN. COMPUTING        1 IBM 370/148       1977
                                                  1 DEG PDP1160       1977
                OFC/COMPUTER ASSTD EDUCAT         1 DEC PDP12         1973
                                                  1 DEC PDP8E         1975
                                                  0 DEC PDP15
                                                  0 IBM 370/168
                SGBA                              1 DEC PDP1140       1976
    HOWARD UNIVERSITY
                DATA PROCESSING CENTER            1 IBM 370/135       1973
                ENGINEERING COMP SCI LAB          1 DAG NOVA840 T     1976
                HU COMPUTER CENTER                1 IBM 370/158       1976
    TRINITY COLLEGE
                COMPUTER COMMITTEE                0 HON
    WASHINGTON TECHNICAL INST
                DATA SYSTEMS DEPT                 1 IBM 370/145       1972
FLORIDA
    BARRY COLLEGE
                BUSINESS AFFAIRS                  0 UNKNOWN
    BREVARD CNTY CCLLEGE
                DATA SERVICES                     1 BUR 3741    -     1975
                                                  1 BUR 771           1976
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                                          QTY MFGR MODEL  DC  YR INSTAL

FLORIDA              (CONTINUED)
    CENTRAL FLA CMTY COLLEGE
                                           0 UNKNOWN
    CHIPOLA JUNIOR COLLEGE
            COMPUTER CENTER                1 IBM 1130           1968
    DAYTONA BCH CMTY COLLEGE
            DATA PROCESSING DEPT           1 BUR 1726           1975
                                           1 NCR 101            1972
                                           1 BUR 6807           1977
    EDISON COMMUNITY COLLEGE
            DATA PROCESSING DEPARTMENT     1 IBM 1130           1969
    EMBRY-RIDDLE AERON U
            COMPUTER CENTER                1 IBM SYS3           1974
                                           1 HEP 2000E          1974
                                           1 HEP 3000
    FL AGRICULTURAL & MECHANICAL U
            MIS/IR                         0 UNKNOWN
    FLORIDA KEYS COMMUNITY COLLEGE
            COMPUTER SERVICES              1 IBM 1130           1971
    FLORIDA STATE UNIVERSITY
            F S U COMPUTING CENTER         1 CDC CYB73          1975
                                           1 CDC CYB74          1977
    GULF COAST CMTY COLLEGE
            BUSINESS EDUCATION DIV         1 NCR 100            1971
    BROWARD CMTY COLLEGE
            DEPT OF DATA SYSTEMS           1 IBM 370/135        1972
    LAKE-SUMTER CMTY COLLEGE
            LSCC COMPUTER CENTER           1 DAG C/300          1976
                                           1 IBM 1130           1968
    MANATEE JUNIOR COLLEGE
            COMPUTER CENTER                1 IBM 360/40         1973
                                           1 DAG NOV1220        1973
                                           1 DAG NOV1220        1973
    MIAMI-DADE CMTY COLLEGE
            COMPUTER CENTER                1 IBM 370/155        1971
    NEW C OF U OF S FLORIDA
            DIV OF NATURAL SCIENCES        1 DEC PDP11          1971
    NORTH FLORIDA JR COLLEGE
            DATA CENTER                    1 IBM 1130           1966
    OKALOOSA-WALTON JUNIOR C
            COMPUTER CENTER                1 IBM SYS3/15        1975
                                           1 DCC D-116          1973
    PALM BEACH JUNIOR COLLEGE
            DATA PROCESSING DEPARTMENT     1 IBM 3125           1975
                                           1 IBM 1401           1967
                                           1 IBM 1620           1963
    POLK COMMUNITY COLLEGE
            DATA PROCESSING                1 BUR 1726           1975
    SEMINOLE CMTY COLLEGE
            DATA INFORMATION DEPARTMENT    1 NCR 100            1970
    SNT JOHNS RIVER JUNIOR C
            DATA PROCESSING DEPT           1 HON 2020           1968
                                           1 DEC PDP8E          1971
    STETSON UNIVERSITY
            DATA PROCESSING DEPARTMENT     1 IBM 1401           1967
    TALLAHASSEE CMTY COLLEGE
            DATA PROCESSING                0 IBM 370/115        1975
                                           1 DCC D-116          1975
    FLORIDA, UNIVERSITY OF
                                           1 AMD 470V/6
    MIAMI, UNIVERSITY OF
            UNIV OF MIAMI COMPUTER SER     1 UNI 1106           1972
                                           1 DEC PDP11    T     1972
                                           1 GAM SPC16    T     1974
    SOUTH FLORIDA, U OF
            CENTRAL FL REGIONAL DATA CTR   1 IBM 360/75         1975
    FLORIDA TECHNOLOGICAL U
            COMPUTER SERVICES              0 IBM 370/165        1977
            ELECTRICAL ENGINEERING         1 DAG NOV1220        1973
    WEST FLORIDA, U OF
            UNIVERSITY COMPUTER SERVICES   1 IBM 360/40         1968
    FLORIDA INTERNATIONAL U.
            FIU COMPUTER SERVICES          0 UNI 1108           1972
                                           0 IBM 360/65
            SOUTHEAST REGIONAL DATA CTR    1 UNI 1108           1972
    NORTH FLORIDA, U OF
            INFORMATION SYSTEMS            0 AMD 470V/6         1977
                                           1 HAR 120      T     1977
GEORGIA
    ABRAHAM BALDWIN AGRL C
            CENTER FOR AUTOMATION          1 DEC PDP8E    T     1974
    AUGUSTA COLLEGE
            COLLEGE DATA SYSTEMS           1 DEC PDP8E    T     1973
    BERRY COLLEGE
            DATA PROCESSING DEPT           1 IBM 360/20         1971
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                                               QTY MFGR MODEL  DC  YR INSTAL

GEORGIA                 (CONTINUED)
     BREWTON-PARKER COLLEGE
                                                 0 UNKNOWN

     BRUNSWICK JUNIOR COLLEGE
               DATA PROCESSING                   1 DEC PDP8E    T     1976
                                                 1 BUR 1700           1976
     COLUMBUS COLLEGE
               COMPUTER CENTER                   1 IBM SYS3     T     1973
                                                 1 IBM 360/40         1977
     EMORY UNIVERSITY
               EMORY UNIVERSITY COMPUTING CTR    1 UNI 70/46          1966
                                                 1 UNI 70/7           1972
     GAINESVILLE JR COLLEGE
               BUSINESS DIVISION                 2 NCR 260
                                                 1 TXI 745            1977
     GA INST OF TECHNOLOGY
               OFFICE OF COMP SERVICES           1 CDC CY874          1975
                                                 1 CDC 6400           1975
     GA INST TECHN-STHN TECH
               SOUTHERN TECH DATA PROC           1 IBM 1401           1967
                                                 0 CDC CY874          1975
     KENNESAW COLLEGE
               DATA PROCESSING                   0 CDC
                                                 0 CDC
     LA GRANGE COLLEGE
               DEPT OF CHEMISTRY                 1 DAG 3230           1977
     MEDICAL COLLEGE OF GA
               COMPUTER SERVICES                 1 IBM 370/138        1976
               RES & EDUCATIONAL SUPPORT         1 HEP 2000     T     1973
                                                 0 CDC CY874
                                                 0 IBM 370/158
                                                 1 DAG NOVA800
                                                 1 DEC PDP8
                                                 1 DEC PDP8
                                                 1 ARTRONICP12
                                                 3 WAN 2200
     MERCER U MAIN CAMPUS
               COMPUTER CENTER                   1 BUR 1700           1977
               MATHEMATICS DEPARTMENT            1 UNI 1004           1973
                                                 1 INT 7/16           1975
                                                 0 CDC CY874
     MIDDLE GEORGIA COLLEGE
               REGISTRAR S OFFICE                1 IBM SYS3/10        1970
     PAINE COLLEGE
               PAINE COLLEGE INFOR. CENTER       1 IBM 1130           1977
     SHORTER COLLEGE
               DEPT OF CHEMISTRY & PHYSICS       1 DEC PDP8           1976
     MERCER UNIV,SOUTHERN SCH OF PH
               PHARMACY PATIENT CARE CENTER      0 DAG S/200
                                                 1 DEC PDP8L          1975
     GEORGIA, UNIVERSITY OF
               COMPUTER CENTER                   2 IBM 370/158        1974
                                                 1 CDC CY874          1975
     VALDOSTA STATE COLLEGE
               VSC COMPUTER CENTER               1 BUR 1726     T     1976
     WEST GEORGIA COLLEGE
               COMPUTER CENTER                   0 CDC CY874          1975
                                                 1 IBM 360/40         1974
                                                 1 CDC 1805           1977
     ATLANTA JUNIOR COLLEGE
               DATA PROCESSING                   1 OTH                1975
     WAYCROSS JUNIOR COLLEGE
               DIV OF NATL SCI / MATH            0 CDC CY874
HAWAII
     HAWAII KAPIOLANI CC, U OF
               DATA PROCESSING DEPT              1 IBM SYS3/10        1974
                                                 0 IBM 370/158
     LEEWARD COMMUNITY COLLEGE
                                                 1 DEC PDP1170        1977
     HAWAII AT HILO, U OF
               COMPUTING CENTER                  1 IBM SYS32          1975
                                                 1 DEC PDP11    T     1975
                                                 1 DEC PDP8           1975
IDAHO
     BOISE STATE UNIVERSITY
               CENTER FOR DATA PROCESSING        1 IBM 370/135        1975
                                                 1 HEP 3000     T     1977
     IDAHO STATE UNIVERSITY
               COMPUTER CENTER                   1 IBM 370/125
                                                 1 HEP 2000
     IDAHO, UNIVERSITY OF
               COMPUTER SERVICES                 1 IBM 370/145        1974
ILLINOIS
     AERO-SPACE INSTITUTE
                                                 0 UNKNOWN
     BARAT COLLEGE
               DEPT OF MATHEMATICS               0 UNKNOWN
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                                                    QTY MFGR MODEL   DC  YR INSTAL

ILLINOIS                 (CONTINUED)
     PRAIRIE STATE COLLEGE
               DATA CENTER                           1 IBM 370/135        1977
     BRADLEY UNIVERSITY
               COMPUTER CENTER                       1 IBM 370/125        1974
                                                     1 DEC PDP8E          1974
                                                     0 UNKNOWN
     CTY COLLEGES CHGO CEN OFF
               INFORMATION PROCESSING                0 UNKNOWN
     HLTH SCI-CHGO MEDL SCH, U
               COMPUTER CENTER                       1 DEC PDP2040        1977
     DEPAUL UNIVERSITY
               UNIVERSITY COMPUTER CENTER            1 IBM 370/138        1977
                                                     1 HEP 2000           1977
     EASTERN ILL UNIVERSITY
               COMPUTER SERVICES                     1 IBM 370/155        1969
                                                     1 DAG S/230     T    1977
                                                     0 CDC CY872
                                                     0 CDC 6800
     EUREKA COLLEGE
               COMPUTER SERVICES                     1 HEP 2000E          1974
     HIGHLAND CMTY COLLEGE
               DIVISION OF BUSINESS ADMINIST         1 HON 2040           1967
     GREENVILLE COLLEGE
                                                     0 IBM 370/135
     ILLINOIS COLLEGE
               COMPUTER CENTER                       0 HEP 2000A
                                                     1 DEC PDP1103        1977
     ILLINOIS INST TECHNOLOGY
               INFORMATION SERVICES                  1 PRI 400            1976
                                                     1 IBM 5100           1976
     ILLINOIS STATE UNIVERSITY
               COMPUTER SERVICES                     1 IBM 370/145        1974
     NTHESTN ILL UNIVERSITY
               COMPUTER SERVICES                     0 IBM 370/145
                                                     0 ITL AS/4
     CHICAGO STATE UNIVERSITY
                                                     0 IBM 370/145
                                                     0 ITL AS/4
     JOLIET JUNIOR COLLEGE
               DATA PROCESSING CENTER                1 NCR 101            1969
                                                     1 4PH 70             1975
     JUDSON COLLEGE
                                                     0 UNKNOWN
     LAKE FOREST COLLEGE
               COMPUTER SERVICES                     1 DEC PDP1140        1973
     LEWIS UNIVERSITY
               MATH AND COMP SCI DEPT                1 HON 1642           1975
                                                     0 PRI 400            1977
                                                     0 HON 2050A          1965
     LOYOLA U OF CHICAGO
               SYSTEMS AND COMPUTERS                 1 IBM 360/65         1973
     MACMURRAY COLLEGE
               PHYSICS DEPARTMENT                    1 HEP 2000A          1969
                                                     1 DEC PDP1134        1978
     MILLIKIN UNIVERSITY
               UNIVERSITY DATA CENTER                1 NCR 101            1973
     MUNDELEIN COLLEGE
               COMPUTER DIVISION                     1 MIC 1600           1977
               MATHEMATICS DEPARTMENT                0 IBM 360/65
     NATL COLLEGE CHIROPRACTIC
               BUSINESS OFFICE                       1 NCR 399
     NATL COLLEGE ED MAIN CAM
               DATA PROCESSING                       1 GAM 18/30     -    1974
     NORTH PARK C & THEOL SEM
               DATA PROCESSING DEPT                  1 GAM 18/30          1974
     NORTHERN ILL UNIVERSITY
               COMPUTING SERVICES DEPT               1 IBM 360/67         1970
                                                     1 IBM 360/20    T    1968
     NORTHWESTERN UNIVERSITY
               ADMIN DATA PROCESSING                 1 IBM 370/138        1977
               VOGELBACK COMPUTING CENTER            1 CDC 6600           1977
     OLIVET NAZARENE COLLEGE
               COLLEGE COMPUTER CENTER               1 GAM 16/440         1976
                                                     1 GAM 16/440         1976
     PRINCIPIA COLLEGE
               MATH DEPARTMENT                       1 HEP 3000           1976
     QUINCY COLLEGE
               COMPUTER TERMINAL RM                  1 SCC DCT-132 T      1970
                                                     0 IBM 360/65
     ROCK VALLEY COLLEGE
               DATA PROCESSING                       1 IBM 360/30         1974
     SAUK VALLEY COLLEGE
               COLLEGE DATA CENTER                   1 NCR 100       -    1974
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                                                 QTY MFGR MODEL  OC  YR INSTAL

ILLINOIS                 (CONTINUED)
     STHN ILLINOIS U CARBONDL
               COMPUTING SERVICES                  1 IBM 370/158       1974
                                                   1 OTH CALDATA       1975
                                                   0 CDC CYB72
                                                   3 DEC PDP8          1973
                                                   1 DEC PDP11         1976
     STHN ILLINOIS U EDWARDSVL
               SCIENCE & TECHNOLOGY                2 HON 516           1969
                                                   1 IBM 1620          1972
                                                   1 HON 21            1969
     ILL BENEDICTINE COLLEGE
               COLLEGE DATA SYSTEM                 1 DEC PDP11         1977
               MATHEMATICS DEPARTMENT              1 HEP 2114B         1970
     THORNTON CMTY COLLEGE
               INFORMATION SYSTEMS                 1 IBM 370/125       1974
     TRITON COLLEGE
               DATA PROCESSING CENTER              1 IBM 360/40        1974
                                                   1 IBM 360/30        1975
                                                   2 BUR 6803          1977
     ILL URBANA CAMPUS, U OF
               CERL                                1 CDC CYB73         1973
                                                   1 CDC 6500          1976
               CHEMISTRY                           4 NIC 1080
                                                   1 DAG S/200
                                                   1 DEC PDP1110
                                                   2 VAR V72
                                                   0 IBM 360/77
                                                   0 CDC CYB175
                                                   1 IBM 1800          1967
                                                  14 DEC PDP8
                                                   2 TXI 980
                                                   2 DAG NOVA800
                                                   2 DAG NOV1200
                                                   1 DAG NOVA3
               CIVIL ENGRG SYSTEM LABORATORY       1 BUR 6700          1973
                                                   1 DEC PDP11         1972
               COORDINATED SCIENCE LABORATORY      1 DEC PDP1060       1973
                                                   1 DEC PDP1140
                                                   1 DEC PDP1134
                                                   2 DEC PDP1104
               ELECT ENG                           1 CDC G-20          1963
                                                   1 CDC G-20          1967
                                                   4 HEP
                                                   7 DEC
                                                  16 UNKNOWN
               MATERIALS RES LAB                   1 DEC PDP2040       1977
               MEDICAL COMPUTING LAB               1 IBM 360/75
                                                   1 CDC CYB73
               PHYSICS DEPT                        1 DEC 10            1972
                                                   6 DEC LSI11         1977
                                                   1 DEC PDP15         1970
                                                   1 DAG 8352          1974
               SERVICE COMPUTERS U OF ILL          1 IBM 360/75        1968
                                                   1 CDC CYB175        1976
               ADMIN. COMP. CENTER                 1 IBM 370/168       1976
               URBANA OFC ADMIN INFO SYS & SE      1 IBM 360/22    T   1974
                                                   1 IBM 360/20        1967
               MATHEMATICS                         1 DAG 230           1976
     ILL CHICAGO CIRCLE, U OF
               ADMIN. DATA PROCESSING              0 IBM 370/168       1976
                                                   1 IBM 360/22    T   1974
               COMPUTER CENTER                     1 IBM 370/158       1973
                                                   1 HEP 2000E         1976
                                                   1 DEC PDP1145       1973
                                                   1 DEC PDP1145       1974
                                                   1 DEC PDP1145       1974
                                                   1 DEC PDP1140       1976
                                                   1 DEC PDP1110       1975
                                                   1 DEC PDP1140       1975
                                                   1 DEC PDP1140       1976
                                                   1 DEC PCP1140       1976
               ADMIN INFO SYS DEVELOPMENT          1 IBM 3777          1977
     WESTERN ILLINOIS UNIVERSITY
               COMPUTER SERVICES                   1 IBM 2050H         1970
                                                   0 CDC CYB72
     WHEATON COLLEGE
               DATA PROCESSING DEPT                1 DEC PDP1145       1974
                                                   1 DEC PDP12         1970
     UNIV OF ILL AT THE MED CENTER
               INFORMATION SYSTEMS & SERVICES      1 IBM 360/22        1973
     DUPAGE, COLLEGE OF
               DATA PROCESSING DEPT                1 IBM 370/135       1973
     WAUBONSEE CMTY COLLEGE
               COMPUTER SERVICES                   1 IBM 370/138 T     1977
                                                   0 IBM 370/168
                                                   0 IBM 360/67
                                                   0 HEP 2000F
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                                                QTY MFGR MODEL     DC    YR INSTAL

ILLINOIS               (CONTINUED)
    PARKLAND COLLEGE
            COMPUTER CENTER                      1 IBM 360/30          1972
    REND LAKE COLLEGE
                                                 0 UNKNOWN
    CARL SANDBURG COLLEGE
            DATA PROCESSING CENTER               1 BUR 1726            1975
    KANKAKEE CMTY COLLEGE
            COMPUTER SERVICES                    1 HON 115             1972
    MCHENRY COUNTY COLLEGE
            BUSINESS OFFICE                      1 OTH IV70      T     1976
                                                31 NCR 101             1976
    LAKE COUNTY, COLLEGE OF
            DATA CENTER                          1 BUR 2771            1974
    JOHN A LOGAN COLLEGE
            JOHN A. LOGAN COLLEGE                0 UNKNOWN
    GOVERNORS ST UNIVERSITY
            COMP & INFORMATION SYSTEMS           1 HEP 2000F           1974
                                                 0 IBM 370/145
                                                 0 ITL AS/4
    COOPERATIVE COMPUTER CENTER
            COMPUTER SERVICES                    1 IBM 370/145         1975
                                                 1 ITL AS/4            1977
    LEWIS AND CLARK CC
            DATA PROCESSING SERVICES             1 NCR 101             1974
    JOHN WOOD CMTY COLLEGE
                                                 0 UNKNOWN
INDIANA
    ANDERSON COLLEGE
            COMPUTING CENTER                     1 HEP 3000II          1976
    BETHEL COLLEGE
            RECORDS OFFICE                       0 IBM 370/158
    BUTLER UNIVERSITY
            HOLCOMB RESEARCH INSTITUTE           1 UNI 90/30           1977
    DEPAUW UNIVERSITY
            COMPUTER CENTER                      1 DEC PDP1145         1973
                                                 1 IBM 1620            1961
    EARLHAM COLLEGE
            COMPUTER CENTER                      1 DEC PDP1170         1975
    EVANSVILLE, UNIVERSITY OF
            COMPUTER & DATA PROCESS CTR          1 IBM 370/135         1972
    FORT WAYNE BIBLE COLLEGE
            DEPT OF COMP SERVICES                0 DEC PDP1140
    FRANKLIN COLLEGE INDIANA
            F.C. COMPUTER CENTER                 1 DEC PDP8E           1974
    GOSHEN COLLEGE
            COMPUTER CENTER                      1 HEP 2100E           1970
                                                 1 DEC PDP1170         1978
                                                 1 DEC PDP8            1968
    GRACE THEOL SEM & COLLEGE
            BUSINESS OFFICE                      0 IBM SYS3/10
            MATH DEPT                            0 DEC PDP1140
            REGISTRAR                            0 IBM SYS3/10
    HUNTINGTON COLLEGE
                                                 0 UNKNOWN
    INDIANA CENTRAL UNIVERSITY
            DATA PROCESSING DEPT                 1 HON 2020            1972
    INDIANA U AT BLOOMINGTON
            BUSINESS COMP FACILITY               1 HON 200       T     1967
            CYCLOTRON FACILITY                   1 HAR 110             1977
                                                 1 HAR 110             1977
                                                 1 HAR SLASH4          1972
            DATA SYSTEMS AND SERVICES            1 IBM 370/158         1976
            INDIANA GEOLOGICAL SURVEY            1 CDC G-15            1960
            MEDICAL SCIENCES                     2 DEC PDP12           1971
                                                 1 DEC PDP8I           1969
                                                 5 DEC LSI11     T     1976
                                                 0 CDC 6600
                                                 0 DEC 10
            WRUBEL COMPUTING CENTER              1 CDC 6600            1970
                                                 1 CDC CYB172          1976
            SCHOOL OF MUSIC                      1 OTH 2100      T     1970
    INDIANA UNIVERSITY EAST
            COMPUTING SERVICES CENTER            0 CDC 6600
                                                 0 CDC CYB172
                                                 0 IBM 370/158
                                                 0 DEC 10
                                                 1 HAR 1200            1974
    INDIANA-PURDUE U AT FORT WAYNE
            COMPUTING & DATA PROC SERV.          1 IBM 370/115         1975
                                                 0 CDC 6600
    INDIANA-PURDUE AT INDIANAPOLIS
            INDIANAPOLIS COMP SERVICES           1 DEC KL10            1974
                                                 1 IBM 370/125         1977
                                                 1 IBM 360/44          1965
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                                                   QTY MFGR MODEL   OC  YR INSTAL
INDIANA                   (CONTINUED)
    INDIANA U AT KOKOMO
            COMPUTER SERVICES                        1 HAR 1200      T    1974
                                                     0 CDC 6600
                                                     0 IBM 370/158
                                                     0 DEC 10
    INDIANA UNIVERSITY NORTHWEST
            COMPUTER SERVICES                        1 HAR 1200           1976
    INDIANA U AT SOUTH BEND
            SC BEND COMPUTING SERVICES               1 IBM 360/20    T    1971
                                                     1 HAR 1200      T    1977
                                                     0 IBM 370/158
                                                     0 CDC 6600
                                                     0 DEC 10
    INDIANA U SOUTHEAST
            COMPUTER SERVICES                        1 HAR 1200      T    1971
    MANCHESTER COLLEGE
            COMPUTER CENTER                          1 IBM SYS32          1977
                                                     1 IBM 1130           1969
                                                     1 IBM SER/1          1977
    MARIAN COLLEGE
            MATHEMATICS DEPT                         0 HON 1648
    MARION COLLEGE
            DIV OF NAT SCI & MATH                    1 DEC PDP8A          1976
    PURDUE U                                         0 DEC PDP1140
            AGRICULTURAL DATA NETWORK                1 DEC PDP1145        1971
                                                     1 DEC PDP1115        1971
                                                     1 DEC PDP1145        1974
                                                     1 DEC PDP1170        1977
            LARS                                     1 IBM 360/67    T    1970
            ADM DATA PROC CTR                        1 IBM 370/148        1977
            BIOLOGICAL SCIENCES                      3 DEC PDP8      T    1968
                                                     1 DAG NOV1200        1970
            CHEMISTRY                                4 HEP 2116
                                                     4 HEP 2100
                                                     2 HEP 2108
                                                     4 DEC PDP8
                                                     3 DEC PDP11
                                                     4 DAG NOVA2
                                                     1 TXI 9600
                                                     2 NIC 1190
            ELECTRICAL ENG                           1 DEC PDP1170        1976
                                                     6 EAI 680            1972
                                                     2 CDC 1700           1973
            PHYSICS                                  1 DEC PDP15          1972
                                                     1 IBM 2044           1968
                                                     1 IBM 2040           1972
            PSYCHOLOGY                               1 DAG NOVA820        1970
                                                     1 DEC LINC/8
                                                     3 DEC PDP8L
                                                     1 DEC PDP12
                                                     2 ADS 1800
                                                     1 PCL 88
                                                     2 DEC COM8001
            PURDUE UNIV COMP CENTER                  1 CDC 6514      -    1967
                                                     1 CDC 6513           1976
                                                     1 DEC PDP1170        1976
            COMPUTER CENTER                          1 IBM 360/30    T    1975
                                                     0 CDC 6500
    PURDUE U CALUMET CAMPUS
            COMPUTER SERVICES                        1 IBM 360/30         1974
                                                     1 PRI 300            1977
                                                     1 IBM 370/125        1976
                                                     1 IBM 370/138        1977
    ROSE-HLLMAN INST OF TECHN
            WATERS COMPUTING CENTER                  1 XDS 530            1975
                                                     1 DEC PDP1140        1973
    SAINT JOSEPH'S COLLEGE
            COMPUTER CENTER                          1 GAM 18/30          1972
                                                     1 HEP 2000F          1977
    CALUMET COLLEGE
            COMPUTER CENTER                          1 IBM SYS3/8         1976
    SAINT MARY'S COLLEGE
            ACADEMIC COMPUTER SERVICES               1 HON 435            1974
    SAINT MEINRAD COLLEGE
                                                     0 UNKNOWN
    TAYLOR UNIVERSITY
            COMPUTING CENTER                         1 DEC PDP1140        1973
    NOTRE DAME, UNIVERSITY OF
            COMPUTING CENTER                         1 IBM 370/158        1972
    VALPARAISO UNIVERSITY
            ACADEMIC COMPUTER CENTER                 1 HEP 3000II         1976
            MEMORIAL                                 1 IBM 360/20         1975
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                                                QTY MFGR MODEL   DC   YR INSTAL

INDIANA                 (CONTINUED)
     IND VOC TECH C-SOUTH BEND
                DATA PROCESSING                 0 UNKNOWN
     INDIANA STATE U MAIN CAM
                COMPUTER CENTER                 1 IBM 360/50          1972
                                                1 IBM 7090            1972
                                                1 DEC PDP8I           1969
                                                1 DAG NOVA            1969
                                                1 DAG NOVA3           1978
                                                1 DEC PDP8E           1972

     IND VOC TECH C CEN OFF
                COLLEGE DATA SYSTEMS            1 IBM 3125            1973
                                                1 IBM 3138            1977

     IND VOC TECH C-KOKOMO
                DATA CENTER                     1 IBM 3776       T    1976
IOWA
     BRIAR CLIFF COLLEGE
                MATH DEPT                       1 IBM 1620
     CENTRAL U OF IOWA
                COMPUTER CENTER                 1 IBM 1130       T    1970
                                                0 IBM 360/158         1969

     COE COLLEGE
                COE COLLEGE COMPUTER CENTER     1 IBM 1130       T    1967
                                                0 IBM 360/65

     OSTEO MED-SURGERY, COLLEGE
                DATA PROCESSING                 1 BUR 1716            1975
     DRAKE UNIVERSITY
                DRAKE COMPUTER CENTER           1 CDC 6400            1974
     ELLSWORTH CMTY COLLEGE
                IOWA VALLEY COMM COLLEGE DIST.  1 DAG NOVA2      T    1975
     IOWA CENTRAL CC
                DATA PROCESSING                 0 ITL AS/5
                                                0 IBM 360/65
                                                0 HEP 2000AC

     GRACELAND COLLEGE
                COMPUTER CENTER                 1 HEP 3000II          1977
     IOWA STATE U SCI & TECHN
                ADP CENTER                      1 IBM 370/145         1972
                                                1 IBM 370/138         1977
                                                1 IBM 360/40          1966
                                                1 UNI 1900            1976
                                                1 ITL AS/5       -    1977
                COMPUTATION CENTER              1 IBM 360/65          1967
                                                2 DEC PDP1140
                                                4 DEC PDP1120
                                                1 DEC PDP1110
                                                1 DEC PDP1104
                                                0 IBM 360/65
                MISCELLANEOUS                   1 DEC PDP1145
                                                4 DEC PDP1134
                                                2 DEC PDP1120
                                                3 DEC PDP1110
                                                1 DEC PDP1105
                                                7 DEC PDP8
                                                2 DEC PDP12
                                                3 DEC PDP15
                                                2 VAR 620
                                                1 HON 516

     LORAS COLLEGE
                COMPUTER CENTER                 0 IBM 360/65
                                                0 CDC CYB70

     LUTHER COLLEGE
                LUTHER COLLEGE COMP CTR         1 HEP 3000            1973
                                                1 HEP 2000            1972

     MARSHALLTWN CMTY COLLEGE
                IUCCD OFFICE                    1 DAG NOVA       T    1975
                                                1 INT                 1977

     N IOWA AREA CMTY COLLEGE                   1 NCR 101             1975

     PALMER JUNIOR COLLEGE                      0 UNKNOWN

     SAINT AMBROSE COLLEGE
                COMPUTER CENTER                 1 BUR 700        T    1976
                                                0 IBM 360/65

     NORTHERN IOWA, U OF
                ACADEMIC COMPUTING CENTER       1 GAM SPC16      T    1974
                                                1 HEP 2000AC          1975
                                                1 IBM 360/40          1968
                DATA PROCESSING CENTER
     IOWA, UNIVERSITY OF
                COMPUTER SCIENCE                1 BUR 1726            1976
                UNIVERSITY COMPUTER CENTER      1 IBM 360/65          1967
                                                1 CDC CYB71      T    1976
                                                1 HEP 2000       T    1973
                                                1 HEP 2000       T    1974
                                                1 HEP 2000       T    1975
                                                1 HEP 2000       T    1974
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                                                 QTY MFGR MODEL  DC  YR INSTAL

   IOWA                 (CONTINUED)
               ADM DATA PROCESSING SERVICE        1 IBM 370/155        1971
               SYSTEMS DEVELOPMENT DEPT           1 IBM 370/158        1976
               PHYSICS COMPUTER FACILITY          1 UNI 418-I          1964
                                                  1 UNI 418-II         1964
                                                  1 UNI 418-III        1974
                                                  3 DAG NOVA2          1974
        UPPER IOWA UNIVERSITY
               DATA CENTER                        1 BUR 1714           1976
                                                  1 IBM 1620           1967
        WALDORF COLLEGE
                                                  0 UNKNOWN
        WARTBURG COLLEGE
               COMPUTER CENTER                    0 IBM 360/65         1967
        KIRKWOOD CMTY COLLEGE
               DATA PROCESSING EDUCATION DEPT     1 IBM 360/40         1970
                                                  1 DAG 5200           1975
        HAWKEYE INST TECHNOLOGY
               STUDENT SERVICES                   0 UNKNOWN
        IOWA WESTERN CC CEN OFF
               COMPUTER CENTER                    1 IBM 360/30         1970
        IOWA WSTN CC COUNCIL BLF
               COMPUTER CENTER                    1 IBM 360/30         1970
        WESTERN IOWA TECH COMM COLLEGE
               DATA PROCESSING                    1 IBM 360/40         1968
        SOUTHEASTERN CMTY COLLEGE
               AREA 16 DATA PROC CENTER           1 DEC PDP8F
   KANSAS
        ALLEN CO CMTY JR COLLEGE
               MATHEMATICS DEPT                   1 OLI P602           1972
                                                  1 BUR 1700           1976
        COWLEY CO CMTY JR COLLEGE
               GERALD H ANDERSON                  1 IBM 1130           1973
        BETHANY COLLEGE
                                                  0 HAR
        FORT HAYS ST UNIV.
               COMPUTING CENTER                   1 IBM 370/125        1974
                                                  0 IBM 370/158
        GARDEN CITY COMMUNITY JC
                                                  0 UNKNOWN
        HUTCHINSN CMTY JR COLLEGE
               COMPUTER CENTER                    1 IBM                1976
        KANSAS CITY KANS CMTY JC
               DATA PROCESSING                    0 IBM 3777           1977
        PITTSBURG STATE UNIVERSITY
               COMPUTING CENTER                   1 IBM 370/125        1974
               MISCELLANEOUS MINICOMPUTERS        1 TEK 4051           1977
                                                  1 SWT 6800           1977
                                                  1 DEC PDP1103        1977
                                                  1 DIG Z80            1977
        EMPORIA STATE UNIV.
               DATA PROCESSING CENTER             1 IBM 370/125        1974
        KANSAS STATE UNIVERSITY
               COMPOSITE DEPTS WITH MINI'S        1 DEC PDP1530        1972
                                                  1 INT 85             1974
                                                  1 INT 7/16           1976
                                                  1 INT 8/32           1976
                                                  1 INT 85             1976
                                                  1 INT 7/32           1977
                                                  1 NCR 8250           1977
                                                  1 DAG NOV1200        1971
                                                  1 DAG NOV1200        1971
                                                  1 DAG NOV1200        1975
                                                  2 DEC PDP8E          1972
                                                  1 DEC PDP1110        1976
                                                  2 DEC PDP1134        1977
                                                  1 DEC PDP1134        1976
                                                  1 DEC PDP1134        1977
               COMPUTING CTR                      1 IBM 370/158        1974
               DATA PROCESSING CENTER             1 IBM 360/30         1969
                                                  1 IBM 370/145        1977
        OTTAWA UNIVERSITY
               COMPUTER CENTER                    1 DAG C/300          1976
        KANSAS NEWMAN COLLEGE
               DATA PROCESSING                    0 UNKNOWN
        SAINT MARY COLLEGE
               BUSINESS OFFICE                    0 IBM SYS3
                                                  0 HON 66/60
                                                  0 IBM 370/135
                                                  0 IBM 1401
        UNIVERSITY OF KANSAS
               OFFICE OF INFORMATION SYSTEMS      1 IBM 370/148        1977
               ACADEMIC COMPUTER CENTER           1 HON 66/60          1976
        WASHBURN U OF TOPEKA
               ADMIN DATA PROCESSING              1 IBM SYS3/10        1973
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                                                  QTY MFGR MODEL  DC  YR INSTAL

KANSAS               (CONTINUED)
                COMPUTER CENTER, ACADEMIC          1 IBM 360/30        1975
                                                   0 IBM 370/138
     KANS MEDICAL CENTER, U OF
                INFORMATION SYSTEMS                1 IBM 3158
                                                   1 IBM 3145          1973
                                                   1 DEC PDP15         1970
                                                   1 DEC PDP12         1970
                                                   1 DEC PDP8L         1969
                                                   2 DEC PDP8          1969
                                                   1 MCC COMPII        1976
                                                   1 HEP 2114A         1969
     BARTON CO CMTY JR COLLEGE
                COMPUTER CENTER                    1 NCR 100           1969
     KANSAS TECHNICAL INST
                COMPUTER TECHNOLOGY DEPT           1 IBM 1130          1967
     MID-AMERICA NAZARENE C
                COMPUTER SERVICES                  1 WAN 2200          1974
                MATHEMATICS DEPT.                  1 DEC PDP8          1972
     SEWARD CO CMTY JR COLLEGE
                DATA PROCESSING                    1 NCR 100
     JOHNSN CO CMTY JR COLLEGE
                DATA PROCESSING DEPT               1 BUR 1724          1977
                                                   0 CDC 6600
                                                   0 IBM 370/158
     BENEDICTINE COLLEGE
                MATHEMATICS                        1 DEC PDP11         1977
KENTUCKY
     BEREA COLLEGE
                COMPUTER CENTER                    1 IBM 1130          1967
     SPALDING COLLEGE
                DEPT OF MATH & SCIENCE             1 HEP 2001
     CENTRE COLLEGE OF KY
                DIVISION OF SCIENCE AND MATH       1 DEC PDP8E         1971
     EASTERN KY UNIVERSITY
                DIV OF ACADEMIC COMP SERVICES      1 DEC PDP1170       1976
                                                   0 IBM 370/165
                                                   0 DEC PDP1080
                DIV OF ADMIN COMP SERVICES         1 HON 2050          1973
     KENTUCKY STATE UNIVERSITY
                COMPUTER CENTER                    1 IBM 1130
     LEES JUNIOR COLLEGE
                DIV OF SOCIAL & BEHAVIORAL SCI     1 WAN WCS-20        1976
     MOREHEAD STATE UNIVERSITY
                DATA PROCESSING DEPT               1 HON 2040A         1975
                EDUCATIONAL & RES COMP CTR         1 DAG NOVA840 T
                PSYCHOLOGY DEPT                    1 WAN 720-C         1969
     STHESTN CHRISTIAN COLLEGE
                CHEMISTRY DEPT                     1 IBM 360/
     TRANSYLVANIA UNIVERSITY
                COMPUTER CENTER                    1 IBM 1130          1968
     UNION COLLEGE
                DATA PROCESSING DEPT               1 NCR 50            1975
     LOUISVILLE, UNIVERSITY OF
                MEDICAL COMPUTER CENTER            1 DEC PDP1145       1972
                                                   1 DEC PDP1120       1967
                SPEED COMPUTER CENTER              1 HAR COPE     T    1969
                                                   1 DEC PDP1134 T     1976
                UNIVERSITY COMPUTER CENTER         1 IBM 360/40        1970
                                                   1 HEP 2000C         1971
                                                   1 DEC PDP1080       1976
                                                   1 DEC PDP1140       1974

     WESTERN KY UNIVERSITY
                COMPUTER CENTER                    1 IBM 360/40        1970
                                                   1 IBM SYS3/10       1973
                                                   1 DEC PDP1145       1975
                                                   1 DEC PDP1110       1975
                                                   1 DEC PDP8          1969
                                                   1 DEC PDP8          1970
     NORTHERN KY UNIVERSITY
                COMPUTER SERVICES                  1 IBM 370/115 T     1975
                                                   0 IBM 370/165       1975
                                                   0 DEC PDP1080       1976
                                                   1 DEC PDP1160       1977
LOUISIANA
     CENTENARY C OF LOUISIANA
                COMPUTING CENTER                   1 IBM 1130          1968
     DILLARD UNIVERSITY
                DIVISION OF NATURAL SCIENCES       0 DEC 10
     NICHOLLS STATE UNIVERSITY
                DATA PROCESSING                    1 HON 2030A         1973
     LOUISIANA COLLEGE
                                                   0 UNKNOWN
     LOUISIANA TECH UNIVERSITY
                LA TECH COMPUTING CENTER           1 IBM 370/148       1977
     LA STATE U AND A&M C
                DATA PROCESSING SERVICES           1 IBM 360/40        1970
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LOUISIANA            (CONTINUED)
                SYSTEM NETWORK COMPUTER CTR       1 IBM 360/65  T     1968
        LA STATE U ALEXANDRIA
                                                  1 NCR               1973
                                                  1 IBM               1977
                                                  1 NCR 500           1973
        LA STATE U EUNICE
                ACADEMIC AFFAIRS & SERVICES       1 IBM 1620          1976
        LA STATE U SHREVEPORT
                DATA PROCESSING CENTER            0 IBM 370/125
                                                  0 IBM 360/65
        LA ST U MEDL CTR
                OFFICE OF COMPUTER SERVICES       1 IBM 370/125       1975
                                                  1 INT 32            1973
                                                  0 IBM 360/65        1968
                                                  0 DEC 10            1973
                                                  1 IBM 370/125       1976
        NEW ORLEANS, UNIVERSITY OF
                COMPUTER RESEARCH CENTER          1 DEC PDP1070       1975
                DATA PROCESSING                   1 IBM 360/          1975
        LOYOLA U IN NEW ORLEANS
                COMPUTER CENTER                   1 CDC 3300          1970
        MCNEESE STATE UNIVERSITY
                ACADEMIC COMPUTING CENTER         1 IBM 1130          1967
                DATA PROCESSING                   1 IBM 360/20        1968
        NORTHEAST LOUISIANA U
                DATA PROCESSING                   1 IBM 370/135       1974
                                                  1 GEC GE310
        NTHWSTN ST U OF LA
                COMPUTING CENTER                  1 UNI 90/60         1974
                                                  1 IBM 1130          1973
        STHESTN LA UNIVERSITY
                COMPUTING CENTER                  1 NCR 151           1976
        STHN U IN NEW ORLEANS
                COMPUTER CENTER                   1 IBM SYS32         1977
        SAINT MARY'S DOMINICAN C
                                                  0 HON 2020           -
        TULANE U OF LOUISIANA
                TULANE COMPUTER LAB               1 IBM 7044          1966
                                                  1 INT 8/32          1975
                                                  1 INT 7/32          1974
        STHWSTN LOUISIANA, U OF
                COMPUTING CENTER                  1 HON 68/80         1975
                                                  0 UNKNOWN
        XAVIER UNIVERSITY OF LA
                ACADEMIC COMPUTING                1 DEC PDP8E         1975
                COMPUTER CENTER                   1 IBM 1130          1968
                MATHEMATICS DEPARTMENT            1 TEK 4051          1977
                                                  1 WAN 2200-B        1974
                PERSONNEL                         0 IBM 370/165
                XAVIER UNIVERSITY LIBRARY         0 UNKNOWN
        DELGADO COLLEGE
                COMPUTER CENTER                   1 HON 2020          1973
        SAINT BERNARD PARISH CC
                                                  1 IBM SYS3          1973
                                                  0 UNKNOWN
        SOUTHERN U A&M C CEN OFF
                S U COMPUTER CENTER               1 IBM 370/125       1974
                                                  0 IBM 370/158
        BOSSIER PARISH CC
                NW LA EVALUATION CENTER           1 HON 2200    T     1968
MAINE
        BATES COLLEGE
                COMPUTING CENTER                  0 HON 635
                                                  3 PRT SOL/703       1977
                LANE HALL                         1 BUR 702     T     1976
        COLBY COLLEGE
                COMPUTER CENTER                   1 DEC 10            1975
        MAINE AT FARMINGTON, U OF
                                                  0 UNKNOWN
        MAINE AT FORT KENT, U OF
                BUSINESS OFFICE                   0 IBM 370/
        HUSSON COLLEGE
                COMPUTER ROOM                     1 DEC PDP1140       1975
        MAINE MARITIME ACADEMY
                ARTS & SCIENCE                    1 IBM 5100    T     1976
                                                  0 IBM 370/
        RICKER COLLEGE
                BUSINESS ADMINSTRATION            1 DEC PDP8M         1975
        MAINE AT ORONO, U OF
                CHEMICAL ENGINEERING DEPT         1 IBM 1800          1970
                                                  1 EAI 218           1972
        BEAL BUSINESS COLLEGE
                DATA PROCESSING DEPARTMENT        1 IBM SYS3/10       1973
        MAINE SYSTEMS WIDE, U OF
                COMPUTING & DATA PROC SERVICES    1 IBM 370/148       1977
MARYLAND
        CAPITOL INST TECHNOLOGY
                ELECTRONICS DEPT                  1 HEP 2000E         1976
                                                  1 DEC PDP8          1968
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                                                QTY MFGR MODEL   DC  YR INSTAL

MARYLAND              (CONTINUED)
    ALLEGANY CMTY COLLEGE
             COMPUTER CENTER                     1 NCR 151            1977
                                                 1 IBM 1130         . 1977
                                                 1 IMS 8080           1977
    ANNE ARUNDEL CMTY COLLEGE
             DATA PROCESSING CURRICULUM          1 IBM 370/135        1973
    BOWIE STATE COLLEGE
             DATA PROCESSING DEPT                0 UNKNOWN
    COLUMBIA UNION COLLEGE
             DATA PROCESSING                     1 HEP 3000           1976
    COPPIN STATE COLLEGE
             COMPUTER CENTER                     1 UNI 1004     T     1972
    ESSEX COMMUNITY COLLEGE
             DATA PROCESSING CENTER              1 IBM 370/125        1977
    GOUCHER COLLEGE
             COMPUTER CENTER                     1 IBM 1130           1966
    HAGERSTOWN JUNIOR COLLEGE
             OFFICE INFORMATION SYSTEMS          1 IBM 360/           1973
    HARFORD COMMUNITY COLLEGE
             DATA PROCESSING DEPT                1 IBM 370/125        1974
    HOOD COLLEGE
             ACADEMIC COMPUTER CENTER            1 DEC PDP8M          1975
             DEPT OF MGT INFO SYSTEMS            0 IBM 360/              .
    JOHNS HOPKINS UNIVERSITY
             COMP FACILITY PHYSICS               1 XDS SIGMA7         1967
                                                 1 SEL 32/55          1976
             UNIVERSITY COMPUTING CENTER         1 IBM 370/138        1977
                                                 1 DEC KL10           1977
    LOYOLA COLLEGE
             DEPT OF PHYSICS AND ENG             1 DEC PDP1150        1975
                                                 1 DEC PDP1120        1971
    MONTGOMERY C TAKOMA PARK CAMPU
             COMP SCI PROG OF MATH DEPT          0 IBM 370/138
    MONTGOMERY C ROCKVILLE
             MANAGEMENT TECHNOLOGIES DEPT        1 INT 6/16           1976
                                                 0 IBM 370/138
    PRINCE GEORGES CC
             INSTITUTIONAL RESEARCH              1 IBM 370/138        1977
    SNT JOHN'S C SANTA FE NM
                                                 0 UNKNOWN
    SNT MARY'S COLLEGE OF MD
             COMPUTER CENTER                     1 UNI 1004     T     1974
             DIV OF NATURAL SCIENCE & MATH       1 WAN 700            1970
                                                 1 ALT 8800           1976
    TOWSON STATE UNIVERSITY
             INFORMATION SYSTEMS                 0 UNI 1106           1973
    BALTIMORE, UNIVERSITY OF
             DATA PROCESSING CENTER              1 UNI 9300     T     1975
                                                 1 UNI 700      T     1977
                                                 0 UNI 1106
    MD COLLEGE PARK CAM. U OF
             DEPT OF INFO SYSTEMS MANAGEMEN      1 UNI 9300     T     1972
             ADMINISTRATIVE DATA PROC            1 UNI 1108           1971
                                                 1 DAG NOV1200        1975
                                                 1 DAG NOV1200        1975
             COMPUTER SCIENCE CENTER             2 UNI 1108           1967
                                                 1 UNI 1100           1976
                                                 1 DEC PDP1145        1966
             DEPT OF PHYSICS & ASTRONOMY         1 DEC PDP1105
                                                 1 DEC 10
                                                 1 DEC PDP1134
                                                 1 DAG NOV1220
                                                 1 DAG ECLIPSE
                                                 3 DAG NOVA2
             ENGR COMPUTER FACILITY              1 UNI 9300     T     1972
                                                 1 DEC PDP8E          1974
                                                 1 DEC PDP1134        1977
                                                 1 HEP 9603A          1977
                                                 1 DEC PDP5           1975
                                                 1 DEC PDP9           1969
                                                 1 DEC PDP11          1973
                                                 1 INT 7/16           1976
             MCKELDIN LIBRARY                    1 UNI 9300     T     1971
                                                 1 SIN SYS10          1972
    MD BALT PROF SCHOOLS, U OF
             HEALTH SCIENCES COMPUTER CTR        1 IBM 370/145        1973
                                                 0 MIC 1600           1977
    MD BALTIMORE CO CAM, U OF
             DATA PROCESSING DEPT                1 UNI 9400           1971
    MD-EASTERN SHORE, U OF
             MATHEMATICS & COMP SCI DEPT         1 IBM 1130           1970
    WASHINGTON COLLEGE
             COMPUTING CENTER                    1 IBM 1130           1969
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                                             QTY MFGR MODEL  DC  YR INSTAL

MARYLAND                 (CONTINUED)
     WESTERN MARYLAND COLLEGE
               COMPUTER CENTER                  1 IBM 370/115     1974
     CHESAPEAKE COLLEGE
                                                0 UNKNOWN
     MONTGOMERY C CENTRAL OFF
               DATA SYSTEMS CENTER              1 IBM 370/138     1977
     MARYLAND SYSTEM OFF, U OF
               CENTRAL COMPUTER FACILITY        1 IBM 360/20      1968
     HOWARD COMMUNITY COLLEGE
                                                1 NCR 151         1975
     WASH THEOL COALITION
                                                0 IBM 370/135
     BAY COLLEGE OF MARYLAND
               DATA PROCESSING                  1 IBM SYS3/10
     MD UNIVERSITY COLLEGE, U
               UNIVERSITY COLLEGE               0 UNKNOWN
MASSACHUSETTS
     AMERICAN INTRNATL COLLEGE
               MATHEMATICS DEPARTMENT           1 WAN 2200        1975
     AMHERST COLLEGE
               COMPUTER CENTER ACADEMIC         1 IBM 1130        1966
                                                0 CCC 2418        1971
               COMPUTER CENTER ADMIN            1 UNI 70/2        1972
     ASSUMPTION COLLEGE
               COMPUTER SERVICES OFFICE         1 DEC PDP1140     1973
     ATLANTIC UNION COLLEGE
               COMPUTER LABORTORY               1 IBM 1130        1977
                                                1 DEC PDP1120     1975
               DATA PROCESSING CENTER           1 IBM 1130        1969
     MERRIMACK COLLEGE
               ACADEMIC AFFAIRS                 1 IBM 1130        1966
                                                1 DEC PDP1170     1976
     BABSON COLLEGE
               COMPUTER SERVICES                1 HEP 2000        1970
                                                1 DEC PDP1170     1976
     BAY PATH JUNIOR COLLEGE
                                                0 UNKNOWN
     BENTLEY COLLEGE
               COMPUTER CENTER                  1 CEC 10          1975
     BOSTON COLLEGE
               COMPUTING CENTER                 1 IBM 370/198     1977
     BOSTON UNIVERSITY
               ACADEMIC COMPUTING CENTER        1 IBM 370/158     1976
               ADMIN DATA PROCESSING            1 IBM 370/145     1973
               BIOSTATISTICS LABORATORY         0 UNKNOWN
               PSYCHOLOGY DEPT                  1 DEC PDP8E       1974
               SCHOOL OF ENGINEERING            1 DEC PDP9        1968
                                                1 GAM 16          1972
                                                1 DEC PDP8F       1972
                                                1 DEC PDP8I       1977
                                                1 DEC PDP1103     1977
     CLARK UNIVERSITY
               COMPUTER CENTER (ACADEMIC)       0 IBM 370/125
                                                0 XDS SIGMA9
                                                1 XDS 530         1973
                                                1 DEC PDP1170     1977
     HOLY CROSS, COLLEGE OF THE
               DATA PROCESSING CENTER           1 IBM 370/125     1973
     EMMANUEL COLLEGE
               PHYSICS RESEARCH DIV.            0 HON 66/40
     ENDICOTT COLLEGE
                                                0 UNKNOWN
     MASS COLLEGE OF PHARMACY
               ACADEMIC COMPUTER SERVICES       1 PRI 300         1975
     CAPE COD CMTY COLLEGE
               COMPUTER CENTER                  1 IBM SYS3/10     1973
     GREENFIELD CMTY COLLEGE
               COMPUTER CENTER                  1 UNI 9200        1972
     HOLYOKE COMMUNITY COLLEGE
               COMPUTER TECHNOLOGY              1 HON 2020        1972
     MT WACHUSETT CMTY COLLEGE
               DATA PROCESSING DEPT             1 IBM 1130        1967
     NORTH SHORE CMTY COLLEGE
               DATA PROCESSING                  1 UNKNOWN
     QUINSIGAMOND CMTY COLLEGE
               DATA PROCESSING                  0 UNKNOWN
     BRISTOL COMMUNITY COLLEGE
               DATA PROCESSING CENTER           1 UNKNOWN         1977
     MASSASOIT CMTY COLLEGE
               COMPUTATION CENTER               1 HAR 6024        1976
     MASS INST OF TECHNOLOGY
               AERONAUTICS & ASTRONAUTICS       1 DEC PDP11       1976
               CTR FOR MATERIAL SCI & ENGNG     1 DEC PDP1140 T   1972
               ELECTRICAL ENGINEERING           1 ACG AGT/30      1968
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		QTY	MFGR	MODEL	DC	YR INSTAL
MASSACHUSETTS (CONTINUED)						
	INFORMATION PROCESSING SERV	1	IBM	3168		1974
		1	HON	6180		1972
	INFORMATION PROCESSING SERVS	1	IBM	370/145		1974
		1	IBM	370/148		1977
	LAB FOR COMPUTER SCIENCE	1	DEC	KA10		1972
		1	DEC	KA10		1969
		1	DEC	KL10		1975
		1	DEC	PDP1170		1976
		5	DEC	PDP1140		1975
		1	DEC	KL10		1977
		2	HON	IMPS		1972
	RESEARCH LAB FOR ELECTRONICS	1	DEC	PDP1140		1973
		1	DEC	PDP9		1968
		1	DEC	PDP9		1968
		1	DEC	PDP8		1974
		1	TEM	TEMPOII		1972
		1	DEC	PDP1110		1976
	SLOAN SCHOOL	1	PRI	300		1975
FRAMINGHAM STATE COLLEGE						
	DATA PROCESSING DEPT	0	CDC	1700	T	1973
		1	DEC	PDP1134		1977
UNIVERSITY OF LOWELL						
	COMPUTER CENTER	1	CDC	CY871		1977
		1	CDC	3100		1973
		1	DEC	PDP9		1967
		0	CDC	CY872		
WESTFIELD STATE COLLEGE						
		0	CDC	CY872		
WORCESTER STATE COLLEGE						
	DATA PROCESSING DEPT	0	CDC	CY8172		
MOUNT HOLYOKE COLLEGE						
	COMPUTER SCIENCE	0	HON	66/40		
		0	CDC	CY874		
		1	DEC	PDP8		1974
	THREE COLLEGE COMP CENTER	0	UNI	70/2		
NORTHEASTERN UNIVERSITY						
	COMPTROLLER S OFFICE	1	IBM	370/125		1974
SMITH COLLEGE						
	ADMIN DATA PROCESSING	1	HIS	105		1972
	COMPUTER CENTER	1	IBM	1130		1967
		0	CDC	6600		
MASS AMHERST CAMPUS, U OF						
	MANAGEMENT SYSTEMS	1	IBM	370/155		1976
		1	IBM	360/30		1970
	UNIVERSITY COMPUTING CENTER	1	CDC	CY874		1974
MASS BOSTON CAMPUS, U OF						
		0	IBM			
WELLESLEY COLLEGE						
	COMPUTATION LABORATORY	0	HON			
		0	DEC	PDP1170		
		1	DEC	PDP1134		1977
		1	DEC	PDP2040		1977
	DATA PROCESSING	1	UNI	9300		1970
WENTWORTH INSTITUTE						
	COMPUTER CENTER	1	DEC	PDP1170		1975
WHEATON COLLEGE						
	DATA PROCESSING	1	IBM	SYS3		1970
		1	IBM	SYS7		1974
WHEELOCK COLLEGE						
		0	UNKNOWN			
WILLIAMS COLLEGE						
	COMPUTER LAB	1	IBM	1130		1966
		1	XDS	530		1974
WORCESTER POLY INSTITUTE						
	MISCELLANEOUS	1	DEC	PDP7		1968
		1	EAI	680		1968
		16	DEC	LSI11		1977
		4	DEC	PDP1110		
		1	DEC	PDP1140		1975
		1	DEC	PDP1135		1975
		2	DEC	PDP8		
	WORC AREA CCL COMPUTATION CTR	1	UNI	90/60		1977
		1	DEC	PDP1050		1971
FORSYTH SCH DENTL HYGNSTS						
	BUSINESS OFFICE	1	IBM	360/20		1975
SIMON'S ROCK EARLY C						
		1	DEC	PDP8		
MASS MEDL SCH-WORCESTER, U OF						
		0	IBM			
BUNKER HILL CMTY COLLEGE						
	DATA PROCESSING	1	IBM	SYS3		1974
MICHIGAN						
ALBION COLLEGE						
	ACADEMIC AFFAIRS	1	BUR	5500		1974

MICHIGAN (CONTINUED)

		QTY	MFGR	MODEL	DC	YR INSTAL
ALMA COLLEGE	COMPUTER SERVICES	1	DEC	PDP1170		1976
CALVIN COLLEGE	DATA PROCESSING DEPT	1	HON	6/36		1974
CALVIN THEOLOGICAL SEM		0	UNKNOWN			
DAVENPORT COLLEGE OF BUS	COMPUTER CENTER	1	GAM	18/04		1975
DETROIT COLLEGE OF BUS	DATA PROCESSING	1	HON	2020		1973
FERRIS STATE COLLEGE	DATA PROCESSING DEPT	1	IBM	370/145		1974
CHAS S MOTT CMTY COLLEGE	COMPUTER CENTER	1	XDS	SIGMA6		1974
GOGEBIC COMMUNITY COLLEGE	DATA PROCESSING	1	IBM	SYS3/10		1973
GRAND LAKES BIBLE COLL		0	UNKNOWN			
KALAMAZOO COLLEGE	COMPUTER CENTER	1	IBM	1620		1964
		1	HON	62/40		1975
		0	DEC	KA10		
LANSING COMMUNITY COLLEGE	M.I.S.	1	IBM	370/138		1977
MACOMB CO CC CEN OFFICE	DATA PROCESSING	1	HON	6023		1975
MADONNA COLLEGE	COMPUTER CENTER	1	IBM	SYS32		1975
SHAW COLLEGE AT DETROIT	COMPUTER CENTER	1	IBM	1130		1976
MICHIGAN STATE UNIVERSITY	ADMIN DATA PROCESSING	1	IBM	3155		1972
	COMPUTER LABORATORY	1	CDC	6500		1968
		1	CDC	6400		1977
		1	HEP	2000		
		2	INT	7/32		
	CYCLOTRON LABORATORY	1	XDS	SIGMA7		1966
		4	DEC	PDP11		
MICHIGAN TECHNOLOGICAL U	COMPUTER CENTER	1	UNI	1110		1973
MONROE CO CMTY COLLEGE	DATA PROCESSING DEPT	1	BUR	1726		1976
MUSKEGON BUSINESS COLLEGE	DATA PROCESSING	1	IBM	1130		1974
NORTHERN MICH UNIVERSITY	COMPUTER CENTER	1	IBM	370/138		1977
		1	DEC	PDP1160		1977
		1	DAG	NOVA1		1970
NORTHWESTERN MICHIGAN COLLEGE	TEA SCHOOLS COMP CENTER	1	NCR	101		1968
		1	DEC	PDP11	T	1977
OAKLAND UNIVERSITY	OFFICE OF COMPUTER SERVICES	1	IBM	360/40		1968
		1	BUR	5500		1973
	SCHOOL OF ENGINEERING	1	DEC	LSI11		1976
		8	MOT	6800		1976
SNT CLAIR CO CMTY COLLEGE	DATA CENTER	1	DSC	METAIV		1974
SCHOOLCRAFT COLLEGE	DATA PROCESSING DEPT	1	BUR	2700		1976
SPRING ARBOR COLLEGE	DATA PROCESSING CENTER	1	DPT	5500		1977
SUOMI COLLEGE		1	IBM	SYS32		1976
DETROIT, UNIVERSITY OF	COMPUTER CENTER	1	BUR	6700		1976
		1	BUR	700		1974
UNIVERSITY OF MICHIGAN-DEARBOR	COMPUTING SERVICES	0	AMD	470V/6	-	1974
		0	HAR	1200		1974
MICHIGAN-FLINT, U OF	COMPUTER CENTER	0	AMD	470V/6		1975
		1	HAR	1200		1972
	COMPUTER DEPARTMENT	0	IBM	370/158		
WASHTENAW CMTY COLLEGE	COMPUTER SERVICES CENTER	1	UNI	90/30		1975
		0	HEP	2000		
WESTERN MICH UNIVERSITY	COMPUTER CENTER	1	DEC	PDP1090		1977
		2	DEC	PDP1140		
		1	DEC	PDP8A		
	DATA PROCESSING	1	IBM	370/148		1975
MACOMB CO CC CENTER CAMPUS		0	UNKNOWN			

			QTY	MFGR	MODEL	DC	YR INSTAL
MICHIGAN (CONTINUED)							
	WEST SHORE CMTY COLLEGE						
		COMPUTER CENTER	1	BUR	1720		1977
	OAKLAND COMMUNITY COLLEGE						
		COMPUTER CENTER	1	IBM	360/50		1971
	MACOMB CO CC SOUTH CAMPUS						
			0	UNKNOWN			
	CPS, ISR, UNIV OF MICHIGAN						
		CENTER FOR POLITICAL STUDIES	1	PRI	300	T	1977
		HUMAN GENETICS	1	IBM	1130		1966
			1	DEC	PDP1170		1975
			1	DEC	PDP8E		1975
		COMP SERV FACILITY	1	IBM	360/40		1967
		RES CENTER FOR GROUP DYNAMICS	1	DEC	PDP1120	T	1974
		SCIENCE & SOCIETY GRP-SRC	1	DEC	PDP8E		1972
		DEPT OF AEROSPACE ENGINEERING	1	DEC	PDP9		1968
		MERIT COMPUTER NETWORK	4	DEC	PDP1120		1971
		POWER SYSTEMS LAB	1	DEC	PDP1120		1972
		SCH OF NATURAL RESOURCES	1	IBM	1130	T	1968
		HIGH ENERGY PHYSICS CENTER	1	DEC	KA10		1969
		INST OF CONTINUING LEGAL ED	1	CCC	D-116	T	1976
		NUCLEAR ENGINEERING	2	DEC	PDP1105		1974
		SCH OF BUSINESS ADMIN	0	AMD	470V/6		
		ENGLISH DEPARTMENT	1	GAT		T	1977
		PHOENIX MEMORIAL LAB	1	ND	4420		1975
		BIOCHEMISTRY	1	DAG	NOVA2	T	1974
		CHEMISTRY	1	DAG	NOVA		1970
			1	DAG	NOV1200		1971
			1	DAG	NOVA2		1976
			1	TXI	980B		1976
		COMPUTING CENTER	1	AMC	470V/6		1975
		INDUSTRIAL & OPERATIONS ENG	1	HEP	2100		1974
		ISMRRD	2	UNT	OPI-32	T	1977
			1	ALT	8800		1977
		MCGRAW HILL OBSERVATORY	1	DAG	NOVA3		1977
		SPACE PHYSICS RESEARCH LAB	1	DEC	PDP8I	T	1970
			1	DEC	PDP8		1967
			1	DEC	PDP1134	T	1977
			1	DEC	PDP1134	T	1977
	WAYNE COUNTY CMTY COLLEGE						
		COM SERVICES DEPT	1	XDS	SIGMA6		1974
MINNESOTA							
	ANOKA-RAMSEY CMTY COLLEGE						
		MATH PHYSICS ENGINEERING	0	UNI			
	AUGSBURG COLLEGE						
			1	UNI	90/30	T	1975
	AUSTIN COMMUNITY COLLEGE						
			0	CDC			
	CARLETON COLLEGE						
		COMPUTER CENTER	1	DEC	PDP8I	-	1969
			1	DEC	PDP8L		1972
			4	DEC	PDP8L	T	1969
			1	CEC	PDP8L		1971
			1	DEC	PDP1120		1972
			1	DEC	PDP1160		1972
		DATA PROCESSING	1	UEC	PDP1140		1974
	SNT CATHERINE, COLLEGE OF						
			0	UNKNOWN			
	SAINT SCHOLASTICA, COLLEGE						
		PHYSICAL & COMP SCIENCE DEPT	1	GAM	16/40		1975
	SAINT TERESA, COLLEGE OF						
		COMPUTER SERVICES	1	GAM	18/30		1973
	SAINT THOMAS, COLLEGE OF						
		COMPUTING CENTER	0	CCC	CYB74		
			0	CDC	CYB73		
			0	CDC	CYB72		
	CONCORDIA C AT MOURHEAD						
		COMPUTER SERVICES	1	BUR	1716		1975
			1	IBM	1620		1967
			0	CDC	6400		
	CONCORDIA C-SAINT PAUL						
		REGISTRAR	0	CDC	6400		
			0	CDC	6400		
	HIBBING COMMUNITY COLLEGE						
			0	UNKNOWN			
	ITASCA COMMUNITY COLLEGE						
		MATH-SCIENCE	0	CCC	CYB72		
			1	WAN	2200		1976
	MACALESTER COLLEGE						
		COMPUTING SERVICES	1	DEC	PDP1170		1976
	MANKATO STATE UNIVERSITY						
			1	UNI	1106		1970
			1	DCN	78		1975
			1	DON	74	T	1975
			0	CCC	CYB73		
			1	DEC	PDP8I		1977

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                                                  QTY MFGR MODEL   DC   YR INSTAL

    MINNESOTA              (CONTINUED)
         METROPOLITAN CMTY COLLEGE
                   MATH SCIENCE                     0 UNI 1110          1976
         MINNEAPOLIS C-ART DESIGN
                                                    0 UNKNOWN
         MOORHEAC STATE UNIVERSITY
                   COMPUTER SERVICES                1 UNI 90/30    T    1976
                                                    0 CDC CYB73
                                                    0 CCC 6400
                                                    0 UNI 1106
         N HENNEPIN CMTY COLLEGE
                                                    0 CDC CYB74    T
                                                    0 UNKNOWN
         STHWST STATE UNIVERSITY
                   COMPUTER SERVICES                0 UNI 1106
                                                    0 UNI 1106
                                                    0 CDC CYB73
         SAINT CLOUD ST UNIVERSITY
                   ADMIN COMPUTER SERVICES          1 UNI 1106          1973
                   COMPUTER SERVICES                1 DON          T    1976
                                                    1 DEC PDP8I         1969
                                                    0 CDC CYB173
                                                    0 CDC CYB72
                                                    0 CDC CYB74
                                                    0 UNI 1106
         SAINT JOHN'S UNIVERSITY
                   COMPUTATION LABORATORY           2 HEP 2000F         1974
         SAINT MARY'S COLLEGE
                   COMPUTER CENTER                  1 IBM 1130          1967
                                                    1 DEC PDP1140       1976
         NORTHLAND CMTY COLLEGE
                                                    0 UNI 1110
         MINNESOTA DULUTH, U OF
                   UMD COMPUTER CENTER              1 CDC 3200          1969
         MINNESOTA MORRIS, U OF
                   UMM COMPUTER CENTER              1 CDC 6400          1972
                                                    1 CDC CYB74         1974
                                                    2 CDC CYB73         1977
         WORTHINGTON CMTY COLLEGE
                   PHYSICS DEPARTMENT               0 UNKNOWN
         MINN MNPLS SNT PAUL, U OF
                   AUDIO VISUAL LIBRARY SERV BUR    1 GAP 18/30         1973
                   DATA PROCESSING CENTER           1 IBM 370/158       1976
                   DIV OF HEALTH COMPUTER           1 CDC 3300          1968
                                                    1 DEC PDP12         1970
                                                    1 DEC PDP8E         1973
                   HOSPITAL OPERATIONS ANALYSIS     1 BUR 4771          1970
                   SPECIAL INTERACTIVE COMP LAB     1 CDC 1700          1968
                                                    1 EAI 680           1968
                                                    1 DEC PDP1140       1976
                   ST PAUL CAMPUS COMP CENTER       1 IBM 360/30        1967
                   UNIVERSITY COMPUTER CENTER       1 CDC 6400          1971
                                                    1 CDC CYB74         1974
                   WEST BANK COMPUTER CENTER        1 CDC 3200          1968
                   UNIVERSITY COMPUTER SERVICES     0 UNKNOWN
                   BIO-MEDICAL SYSTEMS LIBRARY      1 DEC PDP1140       1973
         MINN TECH INST CROOKSTN, U
                   U OF MINN-CROOKSTON COMP SER     1 IBM SYS3          1974
                                                    1 UNI 1004     T    1972
                                                    0 CDC CYB74
                                                    0 CDC 6400
         MINN TECH C-WASECA, U OF
                   U OF MINN-WASECA COMPUTER SERV   0 UNKNOWN
    MISSISSIPPI
         ALCORN STATE UNIVERSITY
                   COMPUTING CENTER                 1 IBM 360/40        1976
         COPIAH-LINCOLN JR COLLEGE
                   DATA PROCESSING                  1 IBM SYS3/10       1972
         DELTA STATE UNIVERSITY
                                                    1 NCR 100
         ITAWAMBA JUNIOR COLLEGE
                   DATA PROCESSING DEPT             1 IBM 360/20        1967
         JACKSON STATE UNIVERSITY
                   COMPUTING CENTER                 1 IBM 370/145       1976
         JONES CO JUNIOR COLLEGE
                   BUSINESS OFFICE                  1 IBM SYS3/10
         MISSISSIPPI COLLEGE
                   COMPUTER CENTER                  1 IBM SYS3          1972
                                                    1 TEK 4051          1976
         MISS GULF CST JC JACKSON
                                                    0 IBM 1130
         MISS GULF CST JEFF DAVIS
                                                    0 IBM 1130
         MISS GULF CST JC PERKINSTN
                                                    0 IBM 1130
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                                              QTY MFGR MODEL   DC   YR INSTAL

MISSISSIPPI           (CONTINUED)
    MISS UNIVERSITY FOR WOMEN
              DATA PROCESSING CENTER          1 IBM SYS3/10         1973
    MISSISSIPPI ST UNIVERSITY
              NUMERICAL SERVICES DIVISION     1 UNI 1106            1970
                                              1 UNI 1106            1975
    PEARL RIVER JR COLLEGE
              DATA PROCESSING DEPT            1 IBM 360/20
    SOUTHWEST MISS JR COLLEGE
                                              1 IBM 360/20          1969
    MISSISSIPPI MAIN CAM, U OF
              COMPUTING & INFORMATION SYSTEM  1 DEC PDP1077         1972
                                              1 DEC PDP1115
                                              2 DEC PDP8I
                                              1 CEC PDP8E
                                              1 DEC PDP12
    SOUTHERN MISSISSIPPI, U OF
              DEPT. OF COMPUTER SCIENCE       1 XDS SIGMA9          1973
                                              2 TXI 960B            1975
                                              1 DAG                 1974
    WILLIAM CAREY COLLEGE
              DATA PROCESSING                 1 IBM SYS3/10         1975
    MISSISSIPPI MEDL CTR, U OF
              COMPUTER CENTER                 0 UNKNOWN
    MISS GULF CST JC CEN OFF
              COMPUTER CENTER                 1 IBM 1130            1967
MISSOURI
    AVILA COLLEGE
                                              0 UNKNOWN
    CENTRAL MO ST UNIVERSITY
              DATA PROC & RES SERV CENTER     1 IBM 370/145         1976
                                              1 IBM 370/148         1977
    COLUMBIA COLLEGE
              DATA PROCESSING DEPT            1 GAP 18/30           1975
    CROWDER COLLEGE
                                              0 IBM 370/115
    DRURY COLLEGE
              REGISTRAR                       1 NCR 100
    EVANGEL COLLEGE
              DATA PROCESSING DEPARTMENT      1 NCR 100             1969
    HARRIS TEACHERS COLLEGE
              TITLE III OFFICE                0 IBM 370/148
    SNT LU CC CENTER CEN OFF
              DATA SYSTEMS                    1 IBM 370/135         1973
    SNT LU CC-FLORISSANT VLY
              COMPUTER CENTER                 1 IBM 360/30          1973
                                              0 HEP 2000
    SNT LU CC-FOREST PARK
              DATA PROCESSING DEPARTMENT      1 HEP 2000AC     T    1974
                                              0 IBM 370/135
    SAINT LOUIS CC-MERAMEC
              DATA PROCESSING LABORATORY      1 IBM 1130       T    1971
                                              0 IBM 370/155
                                              0 IBM 370/135
                                              0 HEP 2000AC
    KANSAS CITY ART INSTITUTE
                                              0 UNKNOWN
    KENRICK SEMINARY
                                              0 UNKNOWN
    KIRKSVL COLLEGE OSTEO MED
              DATA PROCESSING DEPT            1 BUR 2500            1973
    LINCOLN UNIVERSITY
              COMPUTER CENTER                 1 DON 74         T    1976
                                              0 IBM 370/158
                                              0 IBM 370/168
    LINDENWOOD COLLEGES, THE
              COMPUTER CENTER                 1 GAM 18/30           1972
    MARYVILLE COLLEGE
              MATHEMATICS                     0 UNKNOWN
    PENN VALLEY CMTY COLLEGE
              MJC DATA PROC DEPT              0 IBM 370/135
                                              1 IBM 5100            1976
    MINERAL AREA COLLEGE
              GLEN ROUX                       0 UNKNOWN
    MISSOURI STHN ST COLLEGE
              COMPUTER CENTER                 1 IBM 370/115         1973
                                              2 IBM 1130            1967
    MOBERLY JUNIOR COLLEGE
              DEPT OF DATA PROCESSING         1 IBM 1130            1968
    NTHEST MO ST UNIVERSITY
              DATA PROCESSING CTR             1 BUR 3500            1973
                                              1 BUR 761        T    1977
                                              1 HCN 1640            1972
                                              1 IBM 5100            1976
    NTHWST MO ST UNIVERSITY
              DATA PROCESSING CENTER          0 IBM 370/168
                                              0 IBM 370/158
                                              1 DEC PDP1170         1977
                                              1 IBM 360/30          1968
                                              1 HEP 2115            1968
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                                                QTY MFGR MODEL  DC  YR INSTAL

MISSOURI                (CONTINUED)
    ROCKHURST COLLEGE
           COMPUTER CENTER                        0 IBM 370/135
                                                  1 DEC CLASSIC      1975
    OZARKS, SCHOOL OF THE
           COMPUTER CENTER                        1 IBM 370/125      1974
    STHEST MO ST UNIVERSITY
           COMPUTER CENTER                        1 IBM 360/40       1967
                                                  1 IBM 370/135      1973
    STHWST MO ST UNIVERSITY
           COMPUTER CENTER                        1 IBM 370/135      1973
    SAINT LOUIS U
           INFORMATION SYSTEMS                    1 HCN 6023         1976
    STEPHENS COLLEGE
           DATA PROCESSING SERVICE                1 IBM 360/20       1968
           DEPT OF MATHEMATICS                    1 INT 7/16         1974
    TARKIO COLLEGE
           E C P DEPT                             1 GAM 18/30        1973
    MO CEN ADMINCEN OFF, U O
           OFFICE OF COMPUTING ACTIVITIES         1 IBM 370/168      1974
                                                  1 IBM 370/158      1975
                                                  1 IBM 370/125 T    1975
    MISSOURI-COLUMBIA, U OF
           ADVANCED AUTOMATION LABORATORY         1 DEC PDP1110      1976
                                                  1 DEC PDP1120      1972
                                                  1 DEC PDP1150      1975
                                                  1 INT 7/16         1976
                                                  1 INT 7/32         1976
                                                  1 DAG E/230        1977
           CAMPUS COMPUTING CENTER                0 IBM 370/168
                                                  0 IBM 370/158
                                                  2 IBM 360/20  T
                                                  1 IBM 360/22  T    1975
                                                  1 DEC PDP1120 T
                                                  3 DEC PDP8
                                                 10 DEC PDP1103
                                                  1 DEC PDP1105
                                                  2 DEC PDP1134
                                                  1 DEC PDP1120
                                                  1 DEC PDP1140
                                                  1 DAG NOVA840
                                                  1 DAG NOV1200
                                                  1 INT 7/16
                                                  2 TXI 980
           DEPARTMENT OF RADIOLOGY                1 DEC PDP15        1971
                                                  1 DEC PDP1576      1977
           INFORMATION SCIENCE GROUP              1 DEC PDP12        1972
           MEDICAL COMPUTER CENTER                0 IBM 370/168
                                                  0 IBM 370/158
    MISSOURI-ROLLA, U OF
           UMR COMPUTER CENTER                    1 IBM 360/50       1967
                                                  7 DAG NOVA800      1975
                                                  1 DAG ECLIPSE      1977
                                                  1 DAG NOVA840      1976
                                                  2 DAG NOVA2        1976
                                                  0 IBM 370/168
                                                  0 IBM 370/158
           COMPUTER SCIENCE DEPT                  1 MID 1621         1972
                                                  1 HON 516          1976
                                                  1 IMS 8080         1977
    MISSOURI-KANSAS CITY, U OF
           DATA PROCESSING DEPARTMENT             0 IBM 370/168
                                                  0 IBM 370/158
    MISSOURI-SAINT LOUIS, U OF
           COMPUTER CENTER                        0 IBM 370/168
                                                  0 IBM 370/158
                                                  1 GAM SPC16   T    1974
                                                  1 DEC PDP8E        1975
                                                  1 PROGTECH         1977
    WASHINGTON UNIVERSITY
           COMPUTING FACILITIES                   1 IBM 360/65       1973
                                                 12 DEC PDP11
    WESTMINSTER COLLEGE
           COMPUTER CENTER                        1 IBM 3780         1973
    WILLIAM JEWELL COLLEGE
           MATHEMATICS                            1 INT              1975
    WILLIAM WOODS COLLEGE
           COMPUTER CENTER                        1 IBM 3780         1973
    SAINT LOUIS U-PARKS C
           COMPUTATION CENTER                     1 CHI 2130         1975
    LOGAN C OF CHIROPRACTIC
           BUSINESS OFFICE                        1 IBM 5100         1976
    THREE RIVERS CMTY COLLEGE
                                                  0 UNKNOWN
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                                                     QTY MFGR MODEL  DC  YR INSTAL

MISSOURI                 (CONTINUED)
     JEFFERSON COLLEGE
               COMPUTER CENTER                       1 NCR 101           1975
     JC DIST METRO KC SYS OFF
               INFORMATION SYSTEMS                   1 IBM 370/135       1973
     MAPLE WOODS CMTY COLLEGE
               DATA SERVICES                         0 IBM 370/135
     LONGVIEW COMMUNITY COLLEGE
               DATA SERVICES                         0 IBM 370/135
                                                     1 DEC PDP8A         1976
     PIONEER COMMUNITY COLLEGE
               DATA SERVICES                         0 IBM 370/135
MONTANA
     CARROLL COLLEGE
               DATA PROCESSING                       1 NCR 50            1974
     GREAT FALLS, COLLEGE OF
                                                     0 UNKNOWN
     EASTERN MONTANA COLLEGE
               COMPUTER CENTER                       1 IBM 360/20        1967
                                                     1 DEC PDP1050       1977
     MONTANA C MINRL SCI-TECHN
               COMPUTER CENTER                       1 DEC PDP1170       1976
     MONTANA STATE UNIVERSITY
               BUSINESS OFFICE                       1 BUR 1705      T   1977
               COMPUTING CENTER                      1 XDS SIGMA7    -   1968
                                                     1 HON 6/32          1977
               ELECTRICAL ENGINEERING                1 HEP 2116A         1967
                                                     1 HEP 2116B         1970
                                                     1 HEP 2115A         1968
                                                     1 HEP 2114B         1975
                                                     1 HEP 2100A         1974
                                                     1 TXI 960A          1974
                                                     1 DEC PDP1103       1977
               INDUSTRIAL ENG / COMPUTER SCI         1 HEP 21-MX         1976
               MAGNETOHYDRODYNAMICS PROJECT          1 SEL 32/55     T   1976
     ROCKY MOUNTAIN COLLEGE
                                                     0 UNKNOWN
     MONTANA, UNIVERSITY OF
               COMPUTER CENTER                       1 DEC PDP1050       1972
                                                     1 DEC PDP2050       1977
               MISCELLANEOUS                         1 DEC PDP1120       1969
                                                     1 DEC PDP1140       1974
                                                     1 DEC PDP1110       1975
                                                     1 DEC PDP1120       1973
                                                     1 CEC PDP1105 T     1973
     WESTERN MONTANA COLLEGE
                                                     0 UNKNOWN
     FLATHEAD VLY CMTY COLLEGE
               DATA PROCESSING                       1 IBM 1130          1970
NEBRASKA
     CHADRON STATE COLLEGE
               CSC COMPUTER CENTER                   1 IBM 1130          1972
     CONCORDIA TCHRS COLLEGE
               DATA PROCESSING CENTER                1 IBM SYS3/10       1973
     DOANE COLLEGE
               DOANE COLL COMP CENTER                1 DEC PDP1134       1976
     HASTINGS COLLEGE
               MATHEMATICS                           1 DAG NOV1220       1972
     KEARNEY STATE COLLEGE
               COMPUTER CENTER                       1 IBM 360/30        1972
                                                     1 DEC PDP8E         1972
     MIDLAND LUTHERAN COLLEGE
               COMPUTE SCIENCE DEPARTMENT            1 IBM 1130          1970
     NEBR WESLEYAN UNIVERSITY
               COMPUTER FACILITY                     1 DEC PDP1134       1977
                                                     1 IBM 1620          1963
     PERU STATE COLLEGE
               COMPUTING CENTER                      1 MDS 2300      T   1976
     WAYNE STATE COLLEGE
               COMPUTER CENTER                       1 IBM 1130          1972
     SOUTHEAST CC MILFORD CAM
               ELECTRONIC DATA PROCESSING            1 IBM 370/115       1975
     BELLEVUE COLLEGE
               INSTITUTIONAL DATA                    1 WAN 2200      T   1977
     METROPOLITAN TECHNICAL CC
               COMPUTER SERV DEPT                    0 UNKNOWN
NEVADA
     NEVADA LAS VEGAS, U OF
               DEPT OF MATHEMATICS                   1 DCD 70
                                                     1 TXI 980
                                                     1 HEP 9810
               PSYCHOLOGY                            1 DEC PDP8E         1974
     NEVADA SYSTEM OFFICE, U OF
               UNS COMPUTING CENTER                  1 CDC 6400      T   1972
                                                     1 CDC 6400      T   1977
                                                     1 TXI 980           1977
NEW HAMPSHIRE
     COLBY-SAWYER COLLEGE
               NATURAL SCIENCE                       0 UNKNOWN
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                                          QTY MFGR MODEL  OC  YR INSTAL

NEW HAMPSHIRE           (CONTINUED)
     NEW ENGLAND COLLEGE
               COMPUTER CENTER              1 IBM SYS3/10        1972
                                            1 DEC PDP8           1970
     SAINT ANSELM'S COLLEGE
               COMPUTER SCIENCE             1 IBM SYS3           1971
               DATA PROCESSING DEPT         1 IBM SYS3/10        1971
     NEW HAMPSHIRE, U OF
               COMPUTER SERVICES            1 DEC PDP1080        1976
     NEW ENG AERONAUTICAL INST
               COMPUTER SYSTEMS             1 DEC PDP1103 T      1975
NEW JERSEY
     CALDWELL COLLEGE
               MATHEMATICS DEPARTMENT       0 IBM 370/
     SNT ELIZABETH, COLLEGE OF
               IBM ROOM                     0 UNKNOWN
     DREW UNIVERSITY
               UNIVERSITY COMPUTER CENTER   1 IBM 1130           1967
                                            0 IBM 370/168
                                            0 IBM 370/158
     FARLGH DCKSN U RUTHERFD
               RUTHERFORD CAMPUS COMP LAB   0 IBM 370/135
     FARLGH DCKSN TEANECK CAM
               COLL OF BUS COMP LAB         0 IBM 370/135 T      1973
               DEPT OF ELECTRICAL ENGRG     1 DEC PDP8E   T      1975
               DEPT OF INDUSTRIAL ENGINEERING 1 DEC PDP9  T      1968
               DEPT OF MATH & COMP SCI      1 HEP 2116C   T
     GEORGIAN COURT COLLEGE
               DEPT OF MATHEMATICS          1 DEC PDP8A          1976
     GLASSBORO STATE COLLEGE
               COMPUTER CENTER              1 IBM 1130    T      1968
     JERSEY CITY STATE COLLEGE
               DATA PROCESSING CENTER       1 IBM 1130           1970
                                            0 IBM 370/168
     MONMOUTH COLLEGE
               ACADEMIC COMPUTER CENTER     1 INT 7/16           1974
                                            1 DEC PDP9           1977
                                            1 MOT 6800           1976
                                            1 INT 6/16           1976
               ADMIN. COMPUTER CENTER       1 HON 2020           1974
     MED & DENT OF NJ NEWARK, C
               INFORMATION PROC DEPT        1 BUR 3500           1972
                                            3 HEP 21-MX          1976
                                            0 IBM 370/158
                                            0 IBM 370/168
     KEAN C OF NEW JERSEY
               NEWARK ST. COL DATA-CENTER   1 IBM 1130    T      1968
                                            1 HAR 1200    T      1974
                                            0 IBM 370/158
                                            0 IBM 370/158
     NTHESTN BIBLE COLLEGE
                                            0 UNKNOWN
     OCEAN COUNTY COLLEGE
               OCEAN CO COLL INFO NETWORK   1 UNI 70/46          1971
                                            1 INT 7/14           1974
     WILLIAM PATERSON COLLEGE
               DATA PROCESSING              1 IBM 1130    T      1970
                                            0 IBM 370/168
                                            0 IBM 370/158
     PRINCETON UNIVERSITY
               PRINCETON UNIV. COMP. CTR    1 IBM 360/91         1969
                                            1 IBM 370/158        1975
     RIDER COLLEGE
               COMPUTER CENTER              1 DEC 10             1971
     SETON HALL UNIVERSITY
               THE COMPUTER CENTER          1 CDC 3100           1971
     SAINT PETERS COLLEGE
               COMPUTER SCIENCE             1 DAG S/200          1975
                                            0 IBM 370/115
                                            2 DEC PDP8           1968
                                            1 CDC LGP30          1963
               DATA PROCESSING DEPARTMENT   1 IBM 370/115        1974
     STEVENS INST TECHNOLOGY
               COMPUTER CENTER              1 DEC 10             1969
                                            1 DEC PDP8           1969
     TRENTON STATE COLLEGE
               T.S.C. COMPUTER CENTER       1 IBM 1130           1968
     UNION COLLEGE
               COMPUTER CENTER              1 IBM 360/           1975
     WESTMINSTER CHOIR COLLEGE
               BUSINESS OFFICE              1 NCR 399            1975
     BERGEN COMMUNITY COLLEGE
               DATA PROCESSING DEPT         0 UNKNOWN
     FARLGH DCKSN MADISON CAM
               COMPUTER CENTER              1 HEP 2000    T      1976
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                                              QTY MFGR MODEL  DC  YR INSTAL

NEW JERSEY             (CONTINUED)
     MERCER CO CMTY COLLEGE
               COMPUTER CENTER                  1 IBM 360/40         1969
                                                1 DEC PDP1145        1974
     SALEM COMMUNITY COLLEGE
               SCIENCE & TECHNOLOGY DEPT        1 DEC PDP8     T     1969
     UNION CO TECHNICAL INST
               COMPUTER CENTER                  1 IBM 370/135        1973
     RUTGERS U NEW BRUNSWICK
               CTR FOR COMP & INFO SVCC         1 HEP 2000           1973
                                                1 HEP 3000     T     1977
                                                1 DEC KI10           1974
                                                1 IBM 1130     T     1971
               CTR FOR COMP & MANAGEMENT SERV   0 IBM 370/168
                                                0 IBM 370/158
               CTR FOR COMP & INFORM SERV       0 IBM 370/168
                                                0 IBM 370/158
     ESSEX COUNTY COLLEGE
               COMPUTER CENTER                  1 IBM 370/138        1977
     BURLINGTON COUNTY COLLEGE
               COMPUTER CENTER INFORM. SYS.     1 DEC KA10           1972
     FAIRLEIGH DCKSN U, CEN OFF
               UNIVERSITY COMPUTER CENTER       1 IBM 370/135        1973
     RICHARD STOCKTON STATE C
               OFF OF COMPUTER SERVICES         1 IBM 1130     T     1970
     PASSAIC CO CMTY COLLEGE
               DATA PROCESSING                  0 IBM 370/115
                                                0 IBM 370/125
                                                0 UNI 90/60
                                                1 DAG NOVA3          1977
                                                0 IBM 370/158
NEW MEXICO
     NM INST OF MINING & TECHN
               COMPUTING CENTER                 1 IBM 2044           1966
                                                1 DEC PDP2040        1977
     ALBUQUERQUE, UNIVERSITY OF
               C. SCI                           1 IBM SYS3/10        1972
     EASTERN NM U CENTRAL OFF
               COMPUTER CENTER                  1 IBM 360/40         1968
NEW YORK
     ACADEMY OF AERONAUTICS
               TECHNOGIES DEPARTMENT            1 DEC PDP1110        1975
     ALFRED UNIVERSITY
               COMPUTING SERVICES               1 XDS 560            1975
     BROOKLYN LAW SCHOOL
                                                0 UNKNOWN
     CANISIUS COLLEGE
               COMPUTER CENTER                  1 BUR 2700           1976
     CUNY BROOKLYN COLLEGE
               COMPUTER CENTER                  1 IBM 370/145        1972
                                                0 IBM 370/178
               DATA ACQUISITION FACILITY        1 DEC PDP1145        1973
                                                5 DEC PDP1120        1973
               PSYCHOLOGY                      10 DEC PDP8E          1975
                                                1 DEC PDP1110        1976
                                                1 DEC PDP8A
                                                1 DEC PDP8E
     CUNY CITY COLLEGE
               CITY COLL COMPUTATION CENTER     0 IBM 370/168        1974
                                                1 IBM 360/50         1966
                                                1 DEC 10             1973
                                               21 DEC PDP8           1972
     CUNY BORO OF MANHATTAN CC
               DATA PROCESSING DEPT             1 IBM 360/30         1966
                                                1 UNI 70             1970
                                                1 IBM 2922           1975
                                                1 PIL MILAC          1976
     CUNY BRONX CMTY COLLEGE
               BCC DATA PROCESSING CENTER       1 IBM 360/30         1971
                                                1 DEC PDP1140        1975
     SAINT ROSE, COLLEGE OF
               DATA PROCESSING                  1 BUR 1726           1976
     COLUMBIA UNIVERSITY
               BIOLOGICAL SCIENCES              1 ADG AGT/50         1970
                                                1 DEC PDP1145        1971
                                                1 DEC GT40           1972
               CHEMICAL ENGINEERING             1 HEP 2100           1972
               COLLEGE PHYSICANS & SURGEONS     1 DEC PDP8
                                                3 DEC PDP8
                                                1 DEC PDP1145        1976
                                                1 DEC PDP1110
                                                5 DEC PDP11
                                                3 PRI 300
                                                1 HEP 2100A
               COMPUTER CENTER                  1 IBM 360/75         1968
                                                1 IBM 360/91         1969
                                                1 DEC PDP1150        1975
                                                1 DEC PDP2050        1977
                                                1 IBM 370/148        1977
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NEW YORK (CONTINUED)

	QTY	MFGR	MODEL	DC	YR INSTAL
DEPT ELECTRICAL ENGIN	1	CAG	NOVA		1972
	1	DEC	PDP7		
LAMJUT-DOHERTY	1	DEC	PDP1170		1976
	2	DAG	NOVA		1973
	2	CEC	PDP1120		1976
NEVIS LABS	1	IBM	360/65		1975
	1	IBM	360/44		1972
	1	DEC	PDP1170		
	1	DEC	PDP1120		
NUCLEUR SCI & ENGINEERING	1	SEL	8108		
	1	DEC	PDP8		
	1	DEC	PDP11		
DOMINICAN C OF BLAUVELT					
	0	UNKNOWN			
ELMIRA COLLEGE					
DATA PROCESSING DEPT	1	IBM	SYS3/10		1974
	1	DEC	PDP1134		1977
HAMILTON COLLEGE					
HAMILTON COLLEGE DATA PROC	1	NCR	101	T	1974
HARTWICK COLLEGE					
DATA PROCESSING DEPT	1	IBM	5320		1977
	1	GAM	18/30		1974
HOBART-WM SMITH COLLEGES					
COMPUTER CENTER	1	IBM	1130		1966
	1	DEC	PDP1140		1976
HOFSTRA UNIVERSITY					
COMPUTER CENTER	1	UNI	90/60		1977
IONA COLLEGE					
COMPUTING CENTER	1	IBM	370/135		1976
ITHACA COLLEGE					
SYSTEMS AND DATA PROCESSING	1	UNI	70/46		1970
KING'S COLLEGE					
COMPUTER CENTER	1	GAM	18/30		1974
LONG IS U CENTRAL OFFICE					
UNIVERSITY DATA CENTER	1	IBM	370/252		1973
LONG IS U C W POST CENTER					
COMPUTER CENTER	1	GAM	18/30		1974
LONG IS U SOUTHAMPTON CTR					
MATHEMATICS DEPARTMENT	0	DEC	10		
MERCY COLLEGE					
MERCY COLLEGE	1	IBM	5100	T	1975
MOLLOY COLLEGE					
REGISTRAR	0	IBM	360/		
	0	BUR	6700		
MEDAILLE COLLEGE					
	0	UNKNOWN			
MOUNT SAINT MARY COLLEGE					
	0	UNKNOWN			
NEW SCH FOR SOC RESEARCH					
GRADUATE FACULTY	0	IBM	360/40		
NEW YORK MEDICAL COLLEGE					
INFORMATION PROCESSING CENTER	1	IBM	370/135		1972
PARSONS SCHOOL OF DESIGN					
	0	IBM	360/40		
POLYTECHNIC INST NEW YORK					
COMPUTER CENTER	1	IBM	360/65		1975
RENSSELAER POLY INSTITUTE					
INTERACTIVE COMP GRAPHICS CTR	2	PRI	500		1977
OFFICE OF COMPUTER	1	IBM	360/67		1974
ROBERTS WESLEYAN COLLEGE					
	0	HEP	3000		
ROCHESTER INST TECHNOLOGY					
COMPUTER SERVICES	1	XDS	SIGMA9		1976
	1	XDS	530	T	1975
	1	GTH	2400	T	1974
	1	DEC	PDP1134	T	1977
ROCKEFELLER UNIVERSITY					
COMPUTER LABORATORY	1	DEC	PDP15		1970
	1	DEC	PDP8L		1974
CAEMEN COLLEGE					
COMPUTER SCIENCE	0	CDC	CYB173		
	1	BUR	5000		1972
	0	UNI	1005		
SKIDMORE COLLEGE					
COMPUTER APPLICATIONS CENTER	0	UNKNOWN			
SIENA COLLEGE					
COMPUTER CENTER	1	UNI	9300		1972
SAINT BONAVENTURE U					
ACADEMIC COMPUTER CENTER	1	DEC	PDP1140		1975
ADMINISTRATIVE COMPUTER CTR	1	NCR	101		1974
SAINT FRANCIS COLLEGE					
COMPUTER CENTER	1	IBM	1130		1968
SAINT JOHN FISHER COLLEGE					
COMPUTER CENTER	1	DEC	PDP1134		1976
	1	HON	530		1971

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                                                   QTY MFGR MODEL  OC  YR INSTAL

   NEW YORK               (CONTINUED)
        SAINT JOHN'S UNIVERSITY
                DATA CENTER                          1 SCC 1250          1969
        SAINT JOSEPH'S COLLEGE
                MATHEMATICS DEPT                     0 HCN
        SAINT LAWRENCE UNIVERSITY
                ACADEMIC COMPUTER ROOM               1 DEC PDP8          1972
                COMPUTER SERVICES                    1 IBM 370/115       1977
                                                     1 BUR 1100    T     1972
        SUNY AT ALBANY
                COMPUTING CENTER                     1 UNI 1110          1975
                                                     2 MIC 1600          1975
                                                     1 INT 7/16          1976
        SUNY DOWNSTATE MEDL CTR
                COMPUTING CENTER                     1 IBM 370/145       1975
                SCIENTIFIC COMPUTING CENTER          1 IBM 360/44        1966
        SUNY COLLEGE AT BROCKPORT
                ACADEMIC COMP CNTR                   1 PRI 400     T     1977
                DATA PROCESSING                      1 BUR 4700          1977
        SUNY COLLEGE AT BUFFALO
                ACADEMIC COMPUTER CENTER             0 IBM 370/158
                ADMIN. DATA PROCESSING               1 BUR 4700          1966
        SUNY COLLEGE AT CORTLAND
                SUCC COMPUTER SERVICES               1 BUR 4700          1979
        SUNY COLLEGE AT GENESEO
                COMPUTER CENTER                      1 BUR 4771    T     1976
                                                     0 CDC CYB173
                                                     0 IBM 370/158

        SUNY COLLEGE AT OSWEGO
                COMPUTER CENTER                      1 BUR 4700          1976
                                                     1 IBM 1130          1967
        SUNY C ENVRNMTL SCI-FORS
                COMPUTER CENTER                      1 CDC 3200          1971
                                                     0 IBM 370/155
                                                     0 DEC 10
                                                     1 VAR 620           1974
                                                     1 ND  812           1975
                                                     1 CAL 77/80         1972
        SUNY AGRL & TECH C CANTON
                DATA PROCESSING DEPT                 1 IBM SYS3/10       1972
        SUNY AGRL TECH C COBLESKL
                DATA PROCESSING CENTER               1 BUR 4771          1976
        CAYUGA CO CMTY COLLEGE
                DATA CENTER                          1 NCR 200           1970
                                                     1 NCR 8450          1977

        CORNING COMMUNITY COLLEGE
                COMPUTER CENTER                      1 IBM 360/30        1970
                                                     1 IBM 370/55

        DUTCHESS CMTY COLLEGE
                COMPUTER CENTER                      1 IBM 370/125       1974
        HUDSON VLY CMTY COLLEGE
                DATA PROCESSING DEPT                 1 BUR 4771          1975
                                                     0 DEC PDP1150       1975

        JAMESTOWN CMTY COLLEGE
                COMPUTER CENTER                      1 GAM 18/30         1973
        JEFFERSON CMTY COLLEGE
                COMPUTER CENTER                      1 IBM 360/30        1971
        MONROE COMMUNITY COLLEGE
                COMPUTER CENTER                      1 IBM 370/138       1977
                                                     1 DAG NOV1210       1977

        NIAGARA CO CMTY COLLEGE
                                                     1 NCR 201           1969
                                                     1 HEP 2000II        1977

        SUFFOLK CC CMTY COLLEGE
                COMPUTER CENTER                      1 IBM 370/138       1977
                                                     1 DEC PDP8          1975
                                                     1 DEC PDP1134       1978

        SULLIVAN CO CMTY COLLEGE
                COMPUTER CENTER                      1 IBM SYS3          1972
        ULSTER CO CMTY COLLEGE
                COMPUTER CENTER                      1 IBM 1130    T     1970
                                                     0 IBM 370/145       1974

        WESTCHESTER CMTY COLLEGE
                COMPUTER CENTER                      1 UNI 70/45         1970
        SYR UNIV.
                PSYCHOLOGY                           1 DAG 8001
                                                     3 DEC PDP8
                                                     1 DEC PDP11
                ACADEMIC COMPUTING CENTER            1 IBM 370/155       1972
                                                     1 DEC PDP1040       1970
                                                     1 DEC PDP1090       1977
                                                     1 IBM 370/145       1976
                                                     1 DEC PDP1145       1974
                INDR ENGR & OPER RES                 1 DEC PDP8          1970
                                                     1 DEC PDP14         1970
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			QTY	MFGR	MODEL	DC	YR INSTAL
NEW YORK (CONTINUED)							
	ALBANY COLLEGE PHARMACY						
		PHYSICS DEPT	1	DEC	PDP1140		1974
	ROCHESTER, UNIVERSITY OF						
		COMPUTING CENTER	1	IBM	360/65		1968
			1	HEP	2000		1973
		INFORMATION SYSTEMS CENTER	1	IBM	360/50	T	1967
	VASSAR COLLEGE						
		COMPUTER CENTER	1	IBM	370/125		1976
			1	MCM	70	T	1975
			1	IBM	5100	T	1977
			1	IBM	5100	T	1977
	WEBB INST OF NAVAL ARCH						
			0	HON	635		
			0	DEC	10		
			0	CDC	6600		
			1	HEP	9830A		
			1	DEC	PDP1105		
			1	DEC	PDP1105		
			1	HEP	9830A		
			0	HON	437		
			0	CDC	6600		
	WELLS COLLEGE						
		MATH DEPARTMENT	1	DEC	PDP8E		1972
	CUNY GRAD SCH & U CENTER						
		DATA PROCESSING DEPT	1	DEC	PDP1140		1973
			1	DEC	PDP1110		1975
			1	IBM	1130		1968
	NY ST C CERAMICS ALFRED U						
			0	XDS	560		
	CUNY BERNARD BARUCH C						
		ADMINISTRATIVE COMPUTER CENTER	1	IBM	360/40		1969
			1	IBM	360/20		1967
	NY INST TECHN MAIN CAMPUS						
		ADVANCED SYSTEMS LABORATORY	1	XDS	SIGMA9		1975
	GENESEE COMMUNITY COLLEGE						
		DATA PROCESSING	1	IBM	360/30		1975
	SUNY COLLEGE AT PURCHASE						
		COMPUTER SERVICES	0	IBM	370/158		
	SUNY COLLEGE OLD WESTBURY						
		COMPUTER CENTER	0	UNI	1110		
	FINGER LAKES, CMTY COLLEGE						
		DATA PROCESSING DEPT	1	HON	6200		1977
	RUSSELL SAGE C MAIN CAMP						
		COMPUTER CENTER	1	BUR	1714		1974
	CEN CITY BUSINESS INST						
			1	IBM	5000		
	SUNY STATE C OF OPTOMETRY						
		BEHAVIORAL SCIENCES	1	DEC	PDP8E		1971
			1	DEC	PDP1140		1976
			0	UNI	1110		1976
	CUNY MEDGAR EVERS COLLEGE						
		DATA PROCESSING DEPT	1	DEC	PDP1145	T	1975
	NEW YORK CHIROPRACTIC COLL						
			0	UNKNOWN			
	CHRIST THE KING SEMINARY						
			0	NCR			
NORTH CAROLINA							
	BARBER-SCOTIA COLLEGE						
			1	DEC	PDP11		1975
	BENNETT COLLEGE						
		COMPUTER CENTER	1	IBM	1130	T	1976
			1	HEP	2000	T	1975
	CAMPBELL COLLEGE						
		BUSINESS OFFICE	3	BUR	9000		1974
		COMPUTER CENTER	1	IBM	1130	T	1971
	CATAWBA COLLEGE						
		BUSINESS OFFICE	1	IBM	SYS3/10		1970
		MATHEMATICS DEPT	1	IBM	1130		1972
	DAVIDSON COLLEGE						
		DATA PROCESSING DEPT	1	NCR	101		1976
			1	DEC	PDP8F		1975
	DAVIDSON CO CMTY COLLEGE						
		DATA PROCESSING	1	IBM	3780	T	1974
			1	BUR	4000		1975
			0	IBM	370/165		
	DUKE UNIVERSITY						
		ADMIN DATA PROCESSING	0	IBM	370/165		
		COMPUTATION CENTER	1	DEC	PDP15		
			1	HEP	24		
			2	HEP	224		
			2	XDS	SIGMA5		
			1	DAG	NOV1200		
			1	PRI	300		
			1	VAR	1024		
			0	IBM	370/165		
			0	IBM	370/165		
			1	IBM	370/138		1977
			1	IBM	1130		
			16	DEC	PDP8		
			3	DEC	LINC/8		
			31	DEC	PDP11		
			5	DEC	PDP12		

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                                                   QTY MFGR MODEL  DC  YR INSTAL

NORTH CAROLINA          (CONTINUED)
     EAST CAROLINA UNIVERSITY
               COMPUTING CENTER                    1 BUR 5500          1972
     FAYETTEVL ST UNIVERSITY
               COMPUTING CENTER                    1 IBM 1130     T    1973
                                                   0 IBM 370/165       1976
                                                   0 HEP 2000          1976
                                                   1 UNI 70/35
     MARS HILL COLLEGE
               COMPUTER CENTER                     1 IBM SYS3/10 T     1976
                                                   0 IBM 370/165
     MEREDITH COLLEGE
                                                   1 IBM SYS3
     PFEIFFER COLLEGE
               COMPUTER CENTER                     1 IBM 1130          1971
     PIEDMONT BIBLE COLLEGE
               PIEDMONT BIBLE COLLEGE BUS OFF      1 IBM 5320          1975
     QUEENS COLLEGE
               COMPUTER CENTER                     1 IBM 5100     T    1976
     SACRED HEART COLLEGE
                                                   0 UNKNOWN
     SALEM COLLEGE
               MATHEMATICS DEPT                    0 IBM 370/165
                                                   0 HEP 2000
     NC CENTRAL OFFICE, U OF
               INFORMATION SERVICES                0 IBM 370/165
     NC STATE U RALEIGH
               OFFICE OF THE PROVOST               1 IBM 370/135       1975
                                                   0 IBM 370/165
               UNIV SYS ANAL & CNT CNTR            1 IBM SYS7     T    1972
                                                   1 DEC PDP1140 T     1973
                                                   2 EAI TR48          1970
                                                   1 SEL 810B          1976
                                                   1 DAG NOV1200       1974
                                                   1 DEC PDP8          1973
     NC AT CHAPEL HILL, U OF
               ADMIN. DATA PROCESSING              1 UNI 70/7          1972
               THE COMPUTATION CENTER              1 IBM 360/75        1971
                                                   1 IBM 370/155       1976
                                                   0 IBM 370/165
     NC AT GREENSBORO, U OF
               ACADEMIC COMPUTER CENTER            0 IBM 370/165
                                                   0 HEP 2000          1975
               ADMIN. COMPUTER CENTER              1 UNI 70/45         1975
     WSTN CAROLINA UNIVERSITY
               WESTERN CAROLINA COMPUTER CNT       1 XDS 560           1975
     WESTERN PIEDMONT CC
               BUSINESS DEPARTMENT                 1 HON 2020          1974
                                                   1 CLI A7            1976
     NC AT WILMINGTON, U OF
               COMPUTING CENTER                    0 IBM 370/165
     WINSTON-SALEM STATE U
               DATA PROCESSING CENTER              1 UNI 70/45         1977
     ASHEVL BUNCOMBE TECH INST
               COMPUTER CENTER                     1 IBM 360/30        1976
     DURHAM COLLEGE
               COMPUTER CENTER                     1 IBM SYS3/10       1970
     GUILFORD TECHNICAL INST
               BUSINESS DEPT. COMP CENTER          1 DPT 5500          1976
                                                   0 IBM 370/165
     WAKE TECHNICAL INSTITUTE
               DATA PROCESSING DIVISION            1 IBM 1131     T    1972
     FORSYTH TECHNICAL INST
               ECP                                 0 IBM 370/165       1971
                                                   0 IBM 370/165       1977
     CAPE FEAR TECHNICAL INST
               DEPT OF ENGINEERING                 0 UNKNOWN
     RICHMOND TECHNICAL INST
               DATA PROCESSING DEPT.               0 UNKNOWN
     ANSON TECHNICAL INSTITUTE
               BUSINESS OFFICE                     1 OLI A7
     HALIFAX COMMUNITY COLLEGE
               BUSINESS OFFICE                     1 OLI A7            1977
NORTH DAKOTA
     DICKINSON STATE COLLEGE
               OFFICE OF COMPUTING SERVICES        0 IBM 370/135       1975
                                                   1 DEC PDP8E         1974
     JAMESTOWN COLLEGE
               MATHEMATICS DEPT                    1 DEC PDP1103       1976
     MAYVILLE STATE COLLEGE
               COMPUTER CENTER                     0 IBM 370/135
                                                   0 DEC PDP12
     MINOT STATE COLLEGE
               COMPUTER CENTER                     1 IBM 1130          1972
     ND STATE SCHOOL SCIENCE
               BUSINESS DIVISION                   1 IBM 370/115       1974
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                                                QTY MFGR MODEL  DC  YR INSTAL

NORTH DAKOTA              (CONTINUED)
     VALLEY CITY STATE COLLEGE
               COMPUTER CENTER                   1 IBM 3775    T     1973
                                                 0 IBM 370/135       1972
     ND CENTRAL OFFICE, U OF
               COMPUTER CENTER                   1 IBM 370/135       1973
                                                 5 DEC PDP8
                                                 1 IBM 1800
     NC STATE U MAIN CAMPUS
               UNIV COMP CENTER                  1 IBM 360/50        1968
                                                 2 DAG NOVA2         1975
                                                 1 DAG NOVA2         1975
                                                 1 DEC PDP1140       1975
                                                 1 DEC PDP8I         1971
                                                 1 DEC PDP1103       1975
OHIO
     ASHLAND COLLEGE
               DATA PROCESSING                   1 GAM 18/30         1974
     BOWLING GRN ST U MAIN CAM
               COMPUTATIONAL SERVICES            0 IBM 360/75        1971
                                                 0 UNI 1100          1975
                                                 1 IBM 360/20  T     1974
                                                 3 DAG NOV1200 T     1973
                                                 3 DAG NOVA800 T     1974
                                                 1 DAG NOVA2         1975
     CASE WESTERN RESERVE U
               JENNINGS                          0 UNKNOWN
               UNIVERSITY INFORMATION SYSTEMS    1 BUR 1726    T     1976
     CEDARVILLE COLLEGE
               BUSINESS ADMINISTRATION           0 DEC 10
     CENTRAL STATE UNIVERSITY
               DATA (COMPUTER) CENTER            1 NCR 615           1974
               MATHEMATICS                       1 UNKNOWN
               TECHNOLOGY DEPARTMENT             1 DEC PDP8E         1974
                                                 1 DEC PDP8I         1974
     CLEVELAND ST UNIVERSITY
               COMPUTER CENTER                   1 IBM 370/158       1976
     MT SNT JOS-ON-THE-OHIO, C
                                                 0 UNKNOWN
     OHIO DOMINICAN COLLEGE
               COMPUTER SERVICES                 0 CDC 6500
     DEFIANCE COLLEGE
               COMPUTER CENTER                   1 IBM 1130          1968
     DENISON UNIVERSITY
               COMPUTER CENTER                   1 DEC PDP1145       1974
     FINDLAY COLLEGE
               COMPUTER CENTER                   1 IBM 1130
                                                 1 DEC PDP8
     HIRAM COLLEGE
               DRAY COMPUTER CENTER              1 DEC PDP11         1974
     JOHN CARROLL UNIVERSITY
               COMPUTER CENTER                   1 BUR 5700          1972
     KENT STATE U MAIN CAMPUS
               COMPUTER SERVICES                 1 HON 60/40         1973
                                                 1 BUR 6746          1977
                                                 1 BUR 5700          1968
     KENT ST ASHTABULA REG CAM
               ENGINEERING TECHNOLOGY            1 DEC PDP8E         1974
     KENT STATE U., TRUMBULL CAMPUS
               TRUMBULL COMPUTER CENTER          1 BUR 2700          1971
     MALONE COLLEGE
               BUSINESS OFFICE                   1 BUR 731           1976
               DIVISION OF SCI. AND MATH         1 DEC PDP11   T     1977
     MARIETTA COLLEGE
               COMPUTER CENTER                   1 INT 8/32          1977
     MIAMI U HAMILTON BRANCH
               SYSTEMS ANALYSIS                  0 UNKNOWN
     MOUNT UNION COLLEGE
               HAZEL P RODMAN COMPUTER CTR       1 HEP 21-MX         1975
                                                 3 IBM 1620
     MUSKINGUM COLLEGE
               MUSKINGUM COLL COMP CENTER        1 DEC PDP11         1974
     OBERLIN COLLEGE
               IRVIN E HOUCK COMPUTING CENTER    1 DEC PDP1105 T     1974
                                                 1 DEC PDP8M         1976
                                                 1 DEC PDP12C        1970
                                                 1 DEC PDP8E         1974
               IRVIN E. HOUCK COMPUTING CENTE    1 XDS SIGMA9        1975
     OHIO STATE U CENTRAL OFF
               I & R COMPUTER CENTER             1 IBM 370/168       1975
               OSU HOSPITAL COMPUTER CENTER      1 IBM 370/158       1973
                                                 1 DEC PDP12   T     1974
                                                 1 DEC PDP8F         1974
               UNIVERSITY SYSTEMS                1 IBM 370/158       1972
     OHIO STATE U NEWARK BR
                                                 0 UNKNOWN
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                                             QTY MFGR MODEL  DC  YR INSTAL

OHIO                     (CONTINUED)
     OHIO UNIVERSITY
               COMPUTER SERVICES               1 IBM 370/158      1976
     OHIO WESLEYAN UNIVERSITY
               DATA PROCESSING                 1 DEC PDP1170      1976
     OTTERBEIN COLLEGE
               DATA PROCESSING                 0 CDC 6500
                                               0 CDC CYB73
     EDGECLIFF COLLEGE
                                               0 UNKNOWN
     RIO GRANDE COLLEGE
                                               0 UNKNOWN
     SINCLAIR CMTY COLLEGE
               COMPUTER LABORATORY             1 IBM SYS3         1973
     TIFFIN UNIVERSITY
                                               0 UNKNOWN
     DAYTON, UNIVERSITY OF
               COMPUTER SCIENCE DEPT           1 IBM 360/25       1969
               OFFICE FOR COMPUTING ACT        1 UNI 70/7         1972
                                               1 UNI 70/46        1975
     TOLEDO, UNIVERSITY OF
               COMPUTING CENTER                1 DEC PDP1140      1973
                                               1 DEC PDP1170      1975
     WILBERFORCE UNIVERSITY
               INFORMATION SERVICES            0 IBM 360/65
                                               1 4PH 40      T    1977
                                               0 UNI 70/17
     WILMINGTON COLLEGE
                                               1 DEC PDP11
     WITTENBERG UNIVERSITY
               COMPUTER CENTER                 1 IBM 360/30       1969
                                               1 DEC PDP1170      1976
     CUYAHOGA CC WESTERN CAM
               DATA PROCESSING                 1 IBM 360/22       1969
                                               1 IBM SYS32        1975
     CLARK TECHNICAL COLLEGE
               SYSTEMS SERVICES                1 HON 2020         1972
     RAYMOND WALTERS COLL
                                               0 HEP 2000
     MICHAEL J OWENS TECH C
               COMPUTER SERVICES CENTER        1 IBM 370/125      1977
                                               1 HEP 2000         1975
     MIAMI UNIVERSITY MAIN CAM
               COMPUTER CENTER                 1 IBM 370/148      1977
                                               1 HEP 3000         1977
     HOCKING TECHNICAL COLLEGE
               DATA CENTER                     1 IBM SYS3/12      1975
     BOWLING GRN ST FIRELANDS C
               FIRELANDS CAMPUS                1 DAG UT-1    T    1972
     CINCINNATI CENTRAL OFF, U
               SW OHIO REGIONAL COMPUTER CTR   1 AMD 470V/6       1976
                                               1 HEP 2000         1975
                                               1 IBM 360/30  T    1975
                                               1 IBM 1401         1963
                                               1 IBM 1130         1970
                                               1 ACG AD/4         1970
     MUSKINGUM AREA TECH C
               BUSINESS DEPARTMENT             1 IBM 360/         1975
     TERRA TECHNICAL COLLEGE
               BUSINESS DEPARTMENT             1 HON 120          1969
                                               1 DEC PDP1134
     ANTIOCH COLLEGE
               COMPUTER CENTER                 1 HON 1200         1974
     WRIGHT ST U MAIN CAMPUS
               COMPUTER SERVICES               1 IBM 360/65       1973
     CINCINNATI TECH COLLEGE
               MANAGEMENT INFORMATION          1 HON 200          1966
                                               1 DEC PDP1134      1976
                                               1 DEC PDP1170      1977
     MARION TECHNICAL COLLEGE
               COMPUTER SERVICES               1 IBM SYS3/10      1976
                                               1 HEP 2115B        1974
     STARK TECHNICAL COLLEGE
               COMPUTER LAB                    1 IBM SYS3/10      1973
     EDISON STATE GEN-TECH C
               DATA PROCESSING                 1 DEC PDP1134      1977
     AKRON CENTRAL OFF, U OF
               COMPUTER SERVICES               1 IBM 370/158      1974
                                               1 DEC PDP1140      1974
                                               1 DEC PDP1110      1975
     SHAWNEE ST GEN AND TECH C
               ADMIN. DATA PROCESSING          1 HON 2030A        1975
OKLAHOMA
     BACONE COLLEGE
               MATH DEPT                       1 WAN 2200-B       1974
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                                             QTY MFGR MODEL  DC  YR INSTAL

OKLAHOMA                 (CONTINUED)
     BETHANY NAZARENE COLLEGE
               DATA PROCESSING                 1 IBM 1130         1968
     CAMERON UNIVERSITY
               DATA PROCESSING CENTER          1 HEP 3000         1976
     EL RENO JUNIOR COLLEGE
               AUTOMATED DATA SYSTEMS          0 UNKNOWN
     NTHESTN OKLA AGRL-MECH C
               COMPUTER SCI DEPT               1 IBM 360/30       1975
     NORTHERN OKLAHOMA COLLEGE
               BUSINESS                        1 IBM 1130         1969
     OKLAHOMA BAPT UNIVERSITY
               E E NEPTUNE COMP CENTER         1 IBM 1130         1971
     OKLAHOMA CITY UNIVERSITY
               OFFICE OF COMPUTING SERVICES    1 HEP 2000         1976
     SCI & ARTS OF OKLA, U OF
               DATA PROCESSING DEPT            1 IBM 1130         1966
     CLAREMCRE JUNIOR COLLEGE
                                               0 UNKNOWN
     OKLA STATE U MAIN CAMPUS
               SCHOOL OF ELEC ENGR-COMP DIV    1 HEP 21-MX        1974
               UNIVERSITY COMPUTER CENTER      1 IBM 370/158      1976
     STHWSTN OKLA STATE U
               DEPT OF COMP SCIENCE            1 IBM 1130         1966
               DEPT OF MATHEMATICS             1 WAN 2200         1975
               SOCIAL SCIENCES                 1 WAN 2200         1976
     OKLAHOMA NORMAN CAM, U OF
               MERRICK COMPUTER CENTER         1 IBM 370/158      1974
     TULSA, UNIVERSITY OF
               COMPUTING SERVICES              1 XDS              1970
     SOUTH OKLA CTY JR COLLEGE
               MANAGEMENT INFORMATION SERVICE  1 IBM 370/115      1977
OREGON
     BLUE MTN CMTY COLLEGE
               COMPUTER CENTER                 1 DEC POP11        1976
     CLATSCP COMMUNITY COLLEGE
               DATA PROCESSING                 1 IBM 1130         1972
     CONCORDIA COLLEGE
                                               0 UNKNOWN
     GEORGE FOX COLLEGE
               DIVISION OF NATURAL SCIENCE     0 UNKNOWN
     LANE COMMUNITY COLLEGE
               DATA PROCESSING DEPT            1 XDS SIGMA6       1973
     LEWIS AND CLARK COLLEGE
               COMPUTER CENTER                 1 IBM 1130         1967
                                               0 DEC PDP1145
                                               0 HEP 2000
     LINFIELD COLLEGE
               LINFIELD COMPUTER CENTER        1 NCR 8200         1976
                                               1 IBM 1620         1968
                                               1 MD  812          1973
     MOUNT HOOD CMTY COLLEGE
               COMPUTER SERVICES               1 IBM 360/30       1971
     MULTNCMAH SCHOOL OF BIBLE
               DATA PROCESSING                 0 HCN 2040A
     OREGON COLLEGE OF ED
               DEAN OF FACULTY                 0 CDC 3300
     OREGON STATE UNIVERSITY
                                               1 CDC 3300         1965
                                               1 CDC CY873        1975
     OREGON INST OF TECHNOLOGY
               COMPUTER CENTER                 1 HAR 210     T    1976
                                               2 IBM 1401         1968
                                               0 CDC CYB73
                                               0 HON 66/40
     PACIFIC UNIVERSITY
               COLLEGE OF OPTOMETRY            2 DAG NOVA800 T    1970
                                               1 DAG NOVA800      1970
     PORTLAND STATE UNIVERSITY
               COMPUTER CENTER                 1 HAR 220          1976
                                               0 CDC CYB73
                                               0 HON 66/40
     REED COLLEGE
               COMPUTER CENTER                 1 DEC PDP1170      1977
                                               1 IBM 1130         1968
     CHEMEKETA CMTY COLLEGE
               AUTOMATED MANAGEMENT INFO       1 IBM 370/125      1974
     STHWSTN OREG CMTY COLLEGE
               DATA PROCESSING SERVICES        1 NCR CENTURY      1970
                                               1 WAN 2200         1976
     OREGON MAIN CAMPUS, U OF
               BIOLOGY DEPARTMENT              1 DEC PDP8F        1968
                                               1 DEC LINC/8  T    1968
                                               1 DEC PDP1120 T    1972
               CHEMISTRY DEPT LAB             10 VAR 620I         1970
                                               1 VAR 620L         1973
                                               1 VAR 620F         1973
                                               2 VAR 620L         1973
                                               3 VAR 620A         1972
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			QTY	MFGR	MODEL	DC	YR INSTAL
OREGON	(CONTINUED)	COMPUTING CENTER	1	IBM	360/50		1966
			1	DEC	10		1970
		GEOLOGY DEPARTMENT	1	HEP	5830		1974
			1	DEC	PDP1125		1975
			1	CAL	LSI		1976
		MISC	1	HEP	2100A		1972
			1	HEP	21-MY		1975
			1	HEP	2116B		1971
			1	DEC	PDP8L		1970
			1	GAM	SPC16		1971
			1	VAR	620I		1971
			1	DEC	PDP11		1972
		NUCLEAR PHYSICS RESEARCH	1	DEC	PDP7		1966
		PSYCHOLOGY DEPT. LAB	1	DEC	PDP9		1968
			1	DEC	PDP15		1970
			1	PRI	300		1975
	WILLAMETTE UNIVERSITY	COMPUTER CENTER	1	HEP	2000F		1974
			1	IBM	1130		1967
	OREGON HLTH SCI CTR, U OF	HOSPITAL INFORM. SYS. DIV.	1	NCR	201		1971
	OREG ST HIGHER ED SYS OFF	DATA SERVICES CENTER	1	HON	66/40		1975
PENNSYLVANIA	BAPT BIBLE COLLEGE OF PA	BUSINESS OFFICE/REGISTRAR	0	IBM	SYS3		
	ALLIANCE COLLEGE		0	UNI	70/3		
	BEAVER COLLEGE	MATH & COMPUTER SCI DEPT	0	CDC	6400		
			0	HCN	40		
	BRYN MAWR COLLEGE	OFFICE OF COMPUTING SERVICES	0	IBM	370/168		
			0	IBM	370/168		
			1	DEC	PDP8I	T	1968
			1	DEC	PDP8I		1968
			0	IBM	1401		
			0	IBM	360/44		
	BUCKNELL UNIVERSITY	OFFICE OF COMPUTER ACTIVITIES	1	XDS	SIGMA7		1969
			3	DEC	PDP8		
			1	DAG	ALPHA		1973
	BUCKS COUNTY CMTY COLLEGE	COMPUTER CENTER	1	DEC	KA10		1975
	CHATHAM COLLEGE		1	DEC	PDP11		
	PHILADELPHIA, CMTY COLLEGE	COMPUTER CENTER	0	IBM	370/168		
			1	IBM	370/130	T	1965
	DICKINSON COLLEGE	COMPUTER CENTER	1	DEC	PDP1155		1976
			1	IBM	1130		1967
	DREXEL UNIVERSITY	COMPUTER CENTER	1	IBM	370/168		
			1	BUR	5500		
			1	DAG	2000		1976
	DUQUESNE UNIVERSITY	SYSTEMS CENTER	1	CCC	3200		1969
	GENEVA COLLEGE	COMPUTER CENTER	1	IBM	1130		1966
	GETTYSBURG COLLEGE	COMPUTER CENTER	1	BUR	6700		1977
			1	IBM	1130		1968
			2	DEC	PDP8		1977
	HAVERFORD COLLEGE	COMPUTER CENTER	1	IBM	360/44		1968
	HOLY FAMILY COLLEGE		0	UNKNOWN			
	IMMACULATA COLLEGE	MATHEMATICS	0	UNKNOWN			
	INDIANA U OF PA MAIN CAM	COMPUTER CENTER	1	XCS	SIGMA6		1973
			1	CAU	70/10		1977
			1	MIC	1600	T	1971
			1	UNI	1110		1971
	THOMAS JEFF UNIVERSITY	MANAGEMENT SERVICES	1	IBM	370/148		1976
			1	IBM	1800		1972
			1	IBM	SYS7		1972
			1	IBM	SYS7		1975
	JUNIATA COLLEGE	ACADEMIC COMPUTER CENTER	1	DEC	PDP1134		1976
		ADMIN DATA PROCESSING	1	IBM	SYS3		1971
	KING'S COLLEGE	COMPUTING CENTER	1	IBM	370/115		1975

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                                              QTY MFGR MODEL  DC  YR INSTAL

PENNSYLVANIA          (CONTINUED)
     LANCASTER BIBLE COLLEGE
               OFFICE OF BUSINESS AFFAIRS      0 UNKNOWN
     LA SALLE COLLEGE
               COMPUTER CENTER                 1 DEC PDP2040       1976
     LEBANON VALLEY COLLEGE
               COMPUTER CENTER                 1 DEC PDP11         1973
     LEHIGH UNIVERSITY
               COMPUTING CENTER                1 CDC 6400          1968
                                               1 VAR 620F          1972
                                               1 DEC PDP2040
                                               1 DEC PDP1134
     LINCOLN UNIVERSITY
               MATHEMATICS                     1 IBM 1130          1967
                                               1 DEC PDP1170       1977
     LUTHERAN THEOL SEM PHILA
                                               0 UNKNOWN
     MARYWOOD COLLEGE
               DATA PROCESSING DEPT            1 IBM SYS3/8        1976
     MESSIAH COLLEGE
                                               1 DEC CLASSIC       1975
                                               1 BIT 4000          1977
     MUHLENBERG COLLEGE
               LUTHER J DECK COMPUTER CENTER   1 NCR 101           1973
     WIDENER COLLEGE
               DATA PROCESSING DEPARTMENT      1 BUR 1726     T    1974
     CALIFORNIA STATE COLLEGE
               COMPUTER SERVICES               1 UNI 70/46         1973
     CHEYNEY STATE COLLEGE
               COMPUTER CENTER                 1 UNI 70/35         1970
     CLARION STATE C CEN OFF
               COMPUTER CENTER                 1 IBM 360/40        1969
                                               0 XDS SIGMA6        1973
     EAST STROUDSBG ST COLLEGE
               COMPUTING CENTER                1 UNI 70/3          1973
     EDINBORO STATE COLLEGE
               THE COMPUTER CENTER             1 UNI 70/3          1973
     LOCK HAVEN STATE COLLEGE
               COMPUTER CENTER                 1 IBM 370/125       1972
     MANSFIELD STATE COLLEGE
               COMPUTER EDUCATIONAL CENTER     1 UNI 70/3          1973
     SLIPPERY ROCK ST COLLEGE
               COMPUTER CENTER                 1 IBM 370/135       1974
                                               1 IBM SYS7          1972
                                               1 CAG NOVA3         1977
     ALLENTOWN CAMPUS - PSU
                                               0 IBM 370/168
     ALTOONA CAMPUS - PSU
                                               0 IBM 370/168
     BEAVER CAMPUS - PSU
                                               0 IBM 370/168
     BEHREND COLLEGE-PSU
                                               0 IBM 370/168
     BERKS CAMPUS-PSU
                                               0 IBM 370/168
     DUBOIS CAMPUS - PSU
                                               0 IBM 370/168
     PA STATE U FAYETTE CAMPUS
                                               0 IBM 370/168
     HAZLETON CAMPUS - PSU
                                               0 IBM 370/168
     MCKEESPORT CAMPUS-PSU
                                               0 IBM 370/168
     MONT ALTO CAMPUS-PSU
                                               0 IBM 370/168
     NEW KENSINGTON CAMPUS-PSU
                                               0 IBM 370/168
     OGONTZ CAMPUS-PSU
                                               0 IBM 370/168
     SCHUYLKILL CAMPUS PSU
                                               0 IBM 370/168
     WORTHINGTON-SCRANTON-PSU
                                               0 IBM 370/168
     SHENANGO VALLEY CAMPUS-PSU
                                               0 IBM 370/168
     WILKES-BARRE CAMPUS-PSU
                                               0 IBM 370/168
     KING OF PRUSSIA GR CNTR-PSU
                                               0 IBM 370/168
     PHILA COLLEGE PHAR & SCI
               PCPS COMPUTER CENTER            1 HEP 21-MX         1976
     ROBERT MORRIS COLLEGE
                                               1 IBM SYS3          1976
                                               1 DEC PDP1134       1977
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	QTY	MFGR	MODEL	DC	YR INSTAL
PENNSYLVANIA (CONTINUED)					
SPRING GARDEN COLLEGE					
COMPUTER CENTER	1	IBM	360/30		1975
	2	UNI	1004		1970
SAINT FRANCIS COLLEGE					
COMPUTER CENTER	1	IBM	1130		1965
SAINT JOSEPH'S COLLEGE					
DATA CENTER	1	HON	2020		1972
	1	IBM	5100		1976
	0	IBM	370/168		1975
SWARTHMORE COLLEGE					
COMPUTER CENTER	1	IBM	1130	T	1968
	1	IBM	5100	T	1976
	0	IBM	370/168		1974
TEMPLE UNIVERSITY					
COMPUTER ACTIVITY	1	CDC	6400		1970
	1	CCC	6400		1971
	1	TEM	TEMPOI		1973
THIEL COLLEGE					
INSTITUTIONAL DATA	1	NCR	100		1973
PITTSBG BRADFORD CAM, U OF					
COMPUTER CENTER	1	IBM	1130		1970
	1	IBM	SYS32		1977
	1	DEC	LA36	T	
SCRANTON, UNIVERSITY OF					
COMPUTER CENTER	1	XDS	8310		1973
URSINUS COLLEGE					
MATHEMATICS DEPT	0	HON	635		1974
VALLEY FORGE MILITARY JC					
COMPUTER SCIENCE	1	ITL	AS/4		1971
VILLA MARIA COLLEGE					
COMPUTER CENTER	1	IBM	1130		
WAYNESBURG COLLEGE					
MATHEMATICS DEPT	1	WAN	2200		1974
WESTMINSTER COLLEGE					
COMPUTER CENTER	1	GAM	18/30		1974
	0	DEC	10		
WILKES COLLEGE					
COMPUTER CENTER	1	HON	2030	T	1973
	1	HEP	3000		1977
WILLIAMSPORT AREA CC					
DIRECTOR-COMPUTER CENTER	1	UNI	70/35E		1971
MEDL COLLEGE OF PA, THE					
CLINICAL LAB	1	CCC	1780		1977
COMPUTER CENTER	1	IBM	360/40		1969
NUCLEAR MEDICINE	1	DEC	PDP1140		1973
PSYCHIATRY	1	CEC	PDP1140		1976
ALLENTOWN COLLEGE, SNT FRAN					
	1	CDC	200		
LA ROCHE COLLEGE					
	0	UNKNOWN			
ICS CENTER DEGREE STUDIES					
COMPUTER OPERATIONS	1	IBM	360/40		1972
MONTGOMERY CO COMMUNITY C					
DATA PROCESSING DEPT	1	IBM	370/125		1974
BEAVER CO, CMTY COLLEGE OF					
BUSINESS AFFAIRS DIVISION	1	HON	1250		1975
LEHIGH CO CMTY COLLEGE					
DATA CENTER	1	UNI	9300		1971
PA ST U HERSHEY MEDL CTR					
MEDICAL COMPUTER CENTER	1	IBM	370/135		1974
CAPITOL CAMPUS-PSU					
	0	IBM	370/168		
DELAWARE COUNTY CAMPUS-PSU					
	0	IBM	370/168		
PA STATE UNIV PARK CAMPUS					
COMPUTATION CENTER	1	IBM	370/168		1974
	1	ADG	AGT/30		1970
	1	IBM	1401		1962
	1	IBM	360/20		1977
	1	IBM	360/20		1977
UNIVERSITY LIBRARIES	1	XDS	SIGMA9		1975
	1	XDS	530		1974
MANAGEMENT SERVICES	1	IBM	370/158	T	1976
NORTHAMPTON CO AREA CC					
COMPUTER CENTER	1	IBM	360/40		1969
	1	CEC	PDP1170		1975
	1	DEC	PDP8I		1975
TEMPLE U MAIN CAMPUS					
COMP SYS & MANAGEMENT	0	CCC	6400		
	0	CDC	6400		
RHODE ISLAND					
BROWN UNIVERSITY					
ADMIN DATA PROCESSING	1	IBM	360/30		1971
COMPUTING LABORATORY	1	IBM	360/67		1969
	1	IBM	370/138		1977
	1	WAN	2200		1976

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                                                   QTY MFGR MODEL  DC  YR INSTAL

RHODE ISLAND            (CONTINUED)
     PROVIDENCE COLLEGE
               COMPUTER CENTER                      1 IBM 370/115        1974
                                                    1 HEP 2000F          1974
     RHODE ISLAND JR COLLEGE
               DEPT OF COMP RESOURCES               1 IBM 370/135        1974
                                                    1 DEC PDP1134        1977
     RI SCHOOL OF DESIGN
                                                    0 DEC 10
     RHODE ISLAND, U OF
               ACADEMIC COMPUTER CENTER             1 IBM 370/155        1973
               ADMIN COMPUTER CENTER                1 IBM 370/135        1975
                                                    1 IBM 370/138
     ROGER WILLIAMS COLLEGE
               COMPUTER SERVICES                    1 NCR 101            1970
SOUTH CAROLINA
     BENEDICT COLLEGE
               MATHEMATICS DEPARTMENT               1 DEC PDP8I
     CENTRAL WESLEYAN COLLEGE
               COMPUTER SERVICES                    0 IBM 360/158
     CITADEL MILITARY C OF SC
               COMPUTER CENTER                      0 IBM 370/168
               DATA PROCESSING CENTER               0 IBM 370/168
     CLAFLIN COLLEGE
               COMPUTER LAB                         1 DEC PDP8           1975
                                                    1 DEC PDP8           1977
     CHARLESTON, COLLEGE OF
               COMPUTER SERVICES                    0 IBM 370/168        1975
                                                    1 DEC PDP1160        1977
     FURMAN UNIVERSITY
               COMPUTER CENTER                      1 HEP 3000II         1976
                                                    1 IBM SYS3/7         1974
     LANDER COLLEGE
               ADMIN DATA PROCESSING                0 IBM 370/165
     NEWBERRY COLLEGE
               INSTITUTIONAL RES & DEVELOP          1 DEC PDP1145        1976
     NORTH GREENVILLE COLLEGE
               DEPT OF NATL SCI AND MATH            0 DEC PDP11
     SC STATE COLLEGE
               DATA PROCESSING                      1 BUR 1726           1976
     SPARTANBURG METH COLLEGE
               COLLEGE CENTER                       0 UNKNOWN
     WINTHROP COLLEGE
               ACADEMIC COMPUTER CENTER             0 IBM 370/168
               ADMIN COMPUTER CENTER                0 IBM 370/168
     WOFFORD COLLEGE
               COMP CTR - BUSINESS OFFICE           1 IBM SYS3/10        1976
               COMPUTER CENTER                      1 DEC PDP11          1975
     FLORENCE DARLINGTON TECH
               DATA PROCESSING DEPT                 0 IBM 360/65
     SUMTER AREA TECH COLLEGE
               DATA PROCESSING                      1 IBM SYS32          1975
     YORK TECHNICAL COLLEGE
                                                    0 IBM 360/
     TRIDENT TECH C-NORTH CAM
               DATA PROCESSING DEPT                 0 UNKNOWN
     SC AT UNION, U OF
               COM SER AND DATA PROC CTR            0 IBM 370/165
     TRIDENT TECH C CEN OFFICE
               COMPUTER SERVICES                    0 UNKNOWN
     FRANCIS MARION COLLEGE
                                                    0 UNKNOWN
     SC AT SUMTER,U OF
               DIV MATH-COM SCI, BUS ADM-EDUC       0 IBM 370/168
SOUTH DAKOTA
     BLACK HILLS STATE COLLEGE
               COMPUTER CENTER                      0 IBM 370/145
     DAKOTA STATE COLLEGE
               COMPUTER CENTER                      0 IBM 370/145
     NORTHERN STATE COLLEGE
               NSC COMPUTER CENTER                  1 DEC PDP1134        1977
     S.D. SCHOOL OF MINES&TECHNOLOG
               COMPUTATION CENTER                   1 CDC 6400           1977
                                                    1 CDC 3400           1970
                                                    1 DEC PDP8           1968
     SD STATE UNIVERSITY
               COMPUTING CENTER                     1 IBM 370/145        1972
                                                    1 IBM 370/148        1977
     SD MAIN CAMPUS, U OF
               COMPUTER CENTER                      1 IBM 370/145        1974
                                                    1 DEC PDP11          1975
TENNESSEE
     AUSTIN PEAY ST UNIVERSITY
               COMPUTER CENTER                      1 IBM 360/40         1974
                                                    1 WAN WCS            1976
     CARSON-NEWMAN COLLEGE
               COMPUTATION LAB                      1 DEC PDP8E          1973
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                                                QTY MFGR MODEL  DC  YR INSTAL

TENNESSEE              (CONTINUED)
    COLUMBIA ST CMTY COLLEGE
            COMPUTER SCIENCE TECH                 1 IBM 360/22        1972
                                                  1 DEC PDP1170       1977
    FISK UNIVERSITY
            COMPUTER CENTER                       1 IBM 1130          1969
                                                  1 DEC PDP8E         1974
                                                  0 XDS SIGMA7        1973
    FREED-HARDEMAN COLLEGE
            COMPUTER CENTER                       1 BUR 1714          1973
    KING COLLEGE
           ,MATHEMATICS                           1 WAN 2200-B        1975
                                                  1 WAN 2200-T        1976
    KNOXVILLE COLLEGE
            KC COMPUTER CENTER                    1 BUR 1714          1975
    LAMBUTH COLLEGE
            LAMBUTH COMPUTER CENTER               1 IBM SYS3/15       1976
    LANE COLLEGE
            COMPUTER SCIENCE CENTER               1 DAG NOV1220       1973
    MARYVILLE COLLEGE
            MATHEMATICS AND PHYSICS               1 HEP 2114B         1969
    MEHARRY MEDICAL COLLEGE
            MEHARRY COMPUTER CTR                  1 XDS SIGMA7        1969
                                                  1 BUR 3500          1971
    MEMPHIS STATE UNIVERSITY
            CENTER FOR COMPUTER SERVICES          1 XDS SIGMA9        1971
                                                  1 XDS SIGMA9        1972
                                                  1 IBM 1401          1972
    STHN COLLEGE OF OPTOMETRY
            COMPUTER CENTER                       1 HEP 3000          1974
    SOUTHWESTERN AT MEMPHIS
            COMPUTER CENTER                       2 IBM 1620          1967
                                                  1 DEC PDP1170       1977
    STEED COLLEGE
            COMPUTER CENTER                       1 NCR 615           1977
    TENNESSEE ST UNIVERSITY
            ACZAEMIC COMPUTER CENTER              1 GEC GE225         1973
            ADMINISTRATIVE COMPUTER CENTER        1 IBM 360/30        1973
    TENNESSEE TECHNOLOGICAL U
            D.W. MATTSON COMPUTER CENTER          1 BUR 6700          1977
    TREVECCA NAZARENE COLLEGE
                                                  0 UNKNOWN
    UNION UNIVERSITY
            COMPUTER CENTER                       1 HEP 2000          1975
    TENN AT CHATTANOOGA, U OF
            ACADEMIC COMPUTER SERVICES            1 HEP 2000          1975
    TENNESSEE AT MARTIN, U OF
            COMPUTER CENTER                       1 DEC PDP1145       1976
    SOUTH, UNIVERSITY OF THE
            DATA PROCESSING                       1 HEP 2000          1974
    BRYAN COLLEGE
            MATHEMATICS DEPARTMENT                1 DEC PDP8L         1977
                                                  0 DEC KL10
    CLEVELAND ST CMTY COLLEGE
            COMPUTER CENTER                       1 NCR 100           1972
                                                  1 DEC PDP1170       1977
    MOTLOW STATE CMTY COLLEGE
            COMPUTER CENTER                       1 HON 115           1970
    STATE TECH INST MEMPHIS
            COMPUTER SERVICES                     1 IBM 360/30        1968
                                                  1 IBM SYS3          1973
    WALTERS ST CMTY COLLEGE
            OFFICE OF COMPUTER SERVICES           1 HEP 3000          1976
                                                  1 NCR 399           1975
    VOLUNTEER ST CMTY COLLEGE
            COMPUTER SERVICES                     1 DEC PDP1170       1977
    ST U-CC SYS TENN SYS OFF
            COMPUTER SERVICES DEPT                0 XDS SIGMA9        1972
                                                  1 DON
TEXAS
    ALVIN COMMUNITY COLLEGE
            COMP & INFORMATION SYSTEMS            1 HEP 3000          1977
    ANGELO STATE UNIVERSITY
            DATA PROCESSING                       1 IBM 360/25        1971
    AUSTIN COLLEGE
            HOBLITZELLE COMP CENTER               1 IAT 7/32          1975
    CISCO JUNIOR COLLEGE
            DATA PROCESSING                       1 IBM 360/20        1971
    DEL MAR COLLEGE
            DATA PROCESSING DEPT                  1 IBM 370/138       1976
    GRAYSON CO JUNIOR COLLEGE
            DATA PROCESSING DEPT                  1 IBM SYS3/10       1972
    INCARNATE WORD COLLEGE
                                                  0 UNKNOWN
    KILGORE COLLEGE
            COMPUTER SERVICES                     1 IBM 370/145       1977
                                                  1 IBM 1130          1972
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                                            QTY MFGR MODEL  DC  YR INSTAL

TEXAS                     (CONTINUED)
   LETOURNEAU COLLEGE
           MATH DEPARTMENT                    1 IBM 1130          1969
   LON MORRIS COLLEGE
                                              0 UNKNOWN
   MCLENNAN CNTY COLLEGE
           COMPUTER SERVICES                  1 IBM 370/135       1978
   MIDWESTERN ST UNIVERSITY
           DEPT OF MATH                       1 IBM 1130          1963
                                              3 TCL Z/80          1977
   NAVARRO COLLEGE
           DATA PROCESSING                    0 UNI 90/30
   NORTH TEXAS ST UNIVERSITY
           COMPUTING CENTER                   1 IBM 360/50        1970
                                              1 HEP 2000          1976
   ODESSA COLLEGE
           ELEC DATA PROCESSING DEPT          1 UNI 9480          1974
   PAN AMERICAN UNIVERSITY
           COMPUTER CENTER                    1 DEC KA10          1973
   PARIS JUNIOR COLLEGE
                                              1 NCR 101           1974
   SAM HOUSTON ST UNIVERSITY
           DATA PROCESSING                    1 IBM 360/30        1968
   SN ANTO DIST JC CEN OFF
           COMPUTER SERVICES                  1 IBM 370/158       1975
                                              1 IBM 370/148       1977
   SAINT PHILLIP'S COLLEGE
                                              0 IBM 370/158
                                              0 IBM 370/148
   SAN JACINTO COLLEGE
           BUSINESS DATA PROCESSING           1 HON 2032A         1973
   STHWST TEX ST UNIVERSITY
           COMPUTER CENTER                    1 DEC PDP1060       1975
                                              1 DEC PDP1120       1973
   STHWSTN ADVENTIST COLLEGE
           COMPUTER CENTER                    1 BIT 4000          1977
   SNT MARY'S U SAN ANTONIO
           COMPUTER CENTER                    1 NCR 200           1970
   STEPHEN F AUSTIN STATE U
           COMPUTER CENTER                    1 XDS 560           1975
                                              1 HON 6/43          1977
   TEMPLE JUNIOR COLLEGE
           DATA PROC DEPT                     1 IBM 370/115 T     1967
   TEXAS CHRISTIAN U
           COMPUTER CENTER                    1 XDS SIGMA9        1974
                                              1 DEC PDP11         1971
   TEXAS A&I UNIVERSITY
           COMPUTATION CENTER                 1 IBM 360/50        1971
   TEXAS SOUTHERN UNIVERSITY
           COMPUTING SERVICES                 1 IBM 1401
                                              1 DEC PDP2040       1977
   TEXAS SOUTHMOST COLLEGE
           TSC COMPUTER CENTER                1 IBM SYS3          1972
   TEXAS TECH UNIVERSITY
           COMPUTER CENTER                    1 IBM 370/145       1973
           MISC COMPUTERS                     1 WAN 2200-B
                                              1 DEC PDP1140
                                              1 4PH Z800
                                              1 SWT 6800
                                              1 MON 1860
                                              1 DEC PDP8E
                                              1 CDC 1604
                                              2 HEP 2100
           MISC COMPUTERS CONT.               1 IBM 1620
                                              1 DEC PDP12
                                              1 HEP 2000
   TRINITY UNIVERSITY
           COMPUTER CENTER                    0 IBM 370/155       1972
           SUMMARY OF ACADEMIC DEPTS.         1 PCL 88        T   1977
                                              1 COM KIM       T   1977
                                              1 MOT 6800          1976
                                              1 ZIL 6Z80          1977
                                              1 TXI 960A      T   1975
                                              2 DGS 280           1976
   DALLAS, UNIVERSITY OF
           COMPUTER CENTER                    1 HEP 3000CX
   TEXAS AT ARLINGTON, U OF
           ACADEMIC COMPUTING SERVICES        1 IBM 370/155       1977
                                              1 DEC PDP2050       1977
           DATA PROCESSING                    1 HAR 1600      T   1973
   TEX HLTH SCI SN ANTO, U
           COMPUTING RESOURCES                1 DEC PDP2040       1977
                                              0 IBM 370/158       1976
                                              1 DEC PDP1145       1975
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                                                QTY MFGR MODEL  DC  YR INSTAL

TEXAS                       CONTINUED)
     TEXAS AT EL PASO, U OF
               U. T. EL PASO COMPUTER CENTER     1 IBM 360/65         1976
     WAYLAND BAPTIST COLLEGE
               COMPUTER SERVICES                 1 WAN 2200-T         1977
     WHARTON CO JR COLLEGE
               DATA PROCESSING OPERATIONS        1 HEP 3000II         1976
     DALLAS COUNTY COMM COLL DIST
               COMPUTER SERVICES                 1 IBM 370/158        1976
                                                 1 DAG NOVA3          1977
                                                 1 DEC PDP11          1974
                                                 1 IBM 360/30         1977
     BAYLOR COLLEGE MEDICINE
               BAYLOR COMPUTER CENTER            1 DEC 10
     TEX MEDL BR GALVESTON, U
               SERVICE COMPUTATION CTR           1 IBM 370/158
     ANGELINA COLLEGE
               BUSINESS DIVISION                 1 NCR 100            1970
     MAINLAND, COLLEGE OF THE
               COMPUTER SERVICES DEPT            1 HEP 3000CX         1975
     SAN ANTONIO COLLEGE
               COMPUTER SERVICES                 0 IBM 370/158
                                                 0 IBM 370/148
     TEX ST TECH RIO GRANDE
               DATA PROCESSING DEPT              0 DEC 10
     TEX ST TECH INST CEN OFF
               COMPUTER SERVICES                 1 UNI 70/135         1976
     TEXAS A&I U LAREDO
               COMPUTER CENTER                   1 DAG NOVA    T      1974
     TEXAS AT DALLAS, U OF
               COMPUTER SERVICES                 2 DEC PDP1145        1972
                                                 0 IBM 370/155        1973
     TEXAS PERMIAN BASIN, U OF
               COMPUTER SERVICES                 1 HAR 1200    T      1974
     TEXAS A&M UNIVERSITY
               CHEMISTRY DEPT                    1 DEC PDP1110        1976
                                                 1 INT 8/32           1976
                                                 4 DAG NOV1200        1973
                                                 1 DAG NOVA2          1975
                                                 1 DAG NOVA           1972
                                                 1 VAR 620I           1970
                                                 1 NIC NMR
                                                 1 VAR FT-80          1977
                                                 1 HEP GC-MS          1976
                                                 1 DEC PDP8           1974
                                                 1 CDC 1604A          1972
               CYCLOTRON INSTITUTE               1 IBM 7094           1967
                                                 1 IBM 1401           1967
                                                 1 DEC PDP15          1970
               DATA PROCESSING CENTER            1 AMC 470V/6         1975
                                                 1 DEC PDP1120        1972
     TEX A&I U CORPUS CHRISTI
               COMPUTER SERVICES                 1 IBM 3125           1976
     HOUSTON CLEAR LAKE CITY, U
               UNIV COMP CENTER                  1 HEP 2000A          1976
                                                 1 DEC PDP1160        1977
UTAH
     UTAH STATE UNIVERSITY
               COMPUTER CENTER                   1 BUR 6700           1972
                                                 0 UNI 1108
     WEBER STATE COLLEGE
               DATA PROCESSING DEPT              1 DEC PDP1060        1976
                                                 1 DEC PDP1140 T      1976
                                                 1 DEC PDP1140 T      1976
                                                 1 DEC PDP1140 T      1977
     WESTMINSTER COLLEGE
               WESTMINSTER COLL COMP CTR         1 HEP 2000           1975
     UTAH TECH COLLEGE PROVO
               DATA PROCESSING SERVICES          1 DEC PDP1140        1976
                                                 0 DEC 10
VERMONT
     MARLBORO COLLEGE
               SCIENCE DEPT                      1 HEP 9820           1972
     MIDDLEBURY COLLEGE
               ADMIN DATA PROCESSING             1 IBM 360/20         1969
                                                 1 IBM SYS3           1977
               VOTER HALL COMPUTER CENTER        1 DEC PDP1145        1975
     NORWICH UNIV
               COMPUTER CENTER                   1 DEC PDP1145        1974
     VERMONT, CMTY COLLEGE OF
                                                 0 UNKNOWN
VIRGINIA
     WILLIAM & MARY MAIN CAM, C
               COMPUTER CENTER                   1 IBM 370/158        1976
                                                 1 DEC PDP1134        1976
                                                 1 WAN 2200           1974
                                                 1 BUR 8000           1975
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   VIRGINIA              (CONTINUED)
        CHRISTOPHER NEWPORT C
                CNC COMPUTER TERMINAL           0 IBM 370/158
                                                0 CDC 6400          1972
                                                1 DEC PDP8E
                                                2 DCN               1973
        RICHARD BLAND C WM & MARY
                BUSINESS DEPARTMENT             0 IBM 370/158
        EASTERN MENNONITE COLLEGE
                CAMPUS COMPUTING CENTER         1 DEC PDP1140       1975
        EMORY AND HENRY COLLEGE
                PHYSICS                         1 DEC PDP8I         1970
        FERRUM COLLEGE
                RICHESON COMPUTER CENTER        1 IBM 1130          1969
                                                1 IBM SYS32         1977
        TIDEWATER CMTY COLLEGE
                DATA PROCESSING CENTER          1 HEP 3000          1977
        HAMPDEN-SYDNEY COLLEGE
                ACADEMIC COMPUTATION FACILITY   1 IBM 1130          1967
        HAMPTON INSTITUTE
                COMPUTER CENTER                 1 IBM SYS3     T    1971
        INST TEXTILE TECHNOLOGY
                OPER RESEARCH DIV               1 IBM 1130          1966
                                                0 IBM 370/145
        LYNCHBURG COLLEGE
                TRI-COLLEGE COMP CENTER         1 NCR 200           1970
                                                1 HON 1646          1971
        JAMES MADISON UNIVERSITY
                COMPUTER SERVICES               1 HEP 3000          1977
                                                1 HON 200           1975
                                                1 IBM 1130
        MARY BALDWIN COLLEGE
                COMPUTER CENTER                 1 IBM 1130          1971
        NATIONAL BUSINESS COLLEGE
                DATA PROCESSING DEPT            1 IBM SYS3          1977
        NORTHERN VA CMTY COLLEGE
                DATA PROCESSING SERVICES        1 IBM 370/135       1974
        OLD DOMINION UNIVERSITY
                COMPUTER CENTER                 1 DEC PDP1080       1975
        RADFORD COLLEGE
                DATA PROCESSING DEPT            1 HEP 3000     T    1977
                                                0 IBM 370/
        RANDOLPH-MACON COLLEGE
                COMPUTER CENTER                 1 IBM 1800          1969
        RANDOLPH-MACON WOMAN'S C
                TRI-COLLEGE COMP CENTER         1 NCR 200           1970
                                                1 HON 1646          1971
        MCV HOSPITALS OF VCU
                INFORMATION SYSTEMS MCVH        1 IBM 1800
                                                1 DEC PDP15         1974
                COMPUTING ACTIVITES             1 DON 78       T    1974
                                                1 DCN 78       T    1974
                                                2 DCN 74       T    1974
                                                2 TEK 40101    T    1976
                                                1 DCN 74       T    1974
                                                5 GEC 772      T    1977
                                                0 IBM 370/158       1976
                                                0 IBM 370/148       1977
                DATA ACQUISITION FACILITY       1 XDS               1974
                INSTRUCTIONAL FACILITY          1 HEP 3000 II       1977
                VCU/VCCS REGIONAL FACILITY      1 IBM 370/145       1972
                                                1 IBM 370/158       1976
                                                1 IBM 370/148       1977
        SAINT PAUL'S COLLEGE
                DEPT OF SCIENCE & MATH          1 DEC PDP8          1968
        SWEET BRIAR COLLEGE
                TRI-COLLEGE COMP CENTER         1 NCR 200           1970
                                                1 HON 1646          1971
        MARY WASHINGTON COLLEGE
                INSTITUTIONAL RESEARCH          1 HEP 3000          1977
        VA CLINCH VLY COLLEGE, U
                ASSOC DEAN & REGISTRAR          1 DON 78       T    1974
        GEORGE MASON UNIVERSITY
                INSTITUTIONAL ANALYSIS          1 MAR 2000          1975
                                                1 DAG NOVA          1973
        PATRICK HENRY CC
                BUSINESS OFFICE                 0 IBM 370/145
                                                0 IBM 370/158
        VA INTERMONT COLLEGE
                                                0 UNKNOWN
        VIRGINIA MILITARY INST
                COMPUTER CENTER                 1 BUR 5700          1972
                                                0 IBM 370/145
        VA POLY INST AND STATE U
                VPI & SU COMP CENTER            2 IBM 370/158       1976
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   VIRGINIA              (CONTINUED)
        DANVILLE CMTY COLLEGE
                  BUSINESS DIVISION             0 IBM 370/158
                                                0 IBM 370/145
        J SARGEANT REYNOLDS CC
                  COMPUTER CENTER               1 HEP 3000     T    1977
                                                0 IBM 370/
        VA WESTERN CMTY COLLEGE
                  COMPUTER CENTER               0 IBM 370/158
                                                0 IBM 370/145
                                                1 HEP 3000     T    1977
        WYTHEVILLE CMTY COLLEGE
                  DATA PROCESSING CENTER        0 UNKNOWN
        VIRGINIA STATE COLLEGE
                  COMPUTER CENTER               1 IBM 370/125       1974
        VIRGINIA WESLEYAN COLLEGE
                  MATH DEPT                     0 DEC PDP1080
        WASHINGTON AND LEE U
                  COMPUTER CENTER               1 MAR 125           1977
                                                1 IBM 1130          1969
                                                1 DEC PDP8E         1970
        CENTRAL VA CMTY COLLEGE
                  DATA PROCESSING DEPT          1 HEP 3000     T    1977
        DABNEY LANCASTER CC
                  COMPUTER TERMINAL             0 UNKNOWN
        NEW RIVER CMTY COLLEGE
                  MANAGEMENT SERVICES           0 IBM 370/145
                                                0 IBM 370/158
        THOMAS NELSN CMTY COLLEGE
                  COMPUTER CENTER               1 HEP 3000     T    1977
        VA HIGHLANDS CMTY COLLEGE
                  DATA PROCESSING DEPT          0 IBM 370/158
                                                0 IBM 370/145
        GERMANNA CMTY COLLEGE
                  ADMISSIONS & RECORDS          1 DON 88       T    1974
        SOUTHSIDE VA CMTY COLLEGE
                  RESEARCH & DATA PROC SERVICES 0 UNKNOWN
        VIRGINIA STATE CC SYS OFF
                  MANAGEMENT SERVICES           0 IBM 370/158
                                                0 IBM 370/145
        PAUL D CAMP CMTY COLLEGE
                  DATA PROCESSING DEPARTMENT    1 UNI 700      T    1977
                                                0 IBM 370/145
                                                0 IBM 370/158
        RAPPAHANNOCK CMTY COLLEGE
                  ADMISSIONS/RECORDS/RESEARCH   0 IBM 370/145
                                                1 DCN 88       T    1974
        MTN EMPIRE CMTY COLLEGE
                  OFFICE OF ADMISSIONS & RECORDS 0 UNKNOWN
        PIEDMONT VA CMTY COLLEGE
                  COMPUTER TERMINAL             0 IBM 370/158
                                                0 IBM 370/145
        EASTERN VA MEDL AUTHORITY
                  DATA PROCESSING               1 IBM SYS3/15       1977
                                                0 IBM 370/158
                                                0 IBM 370/145
                  PHYSIOLOGY DEPT               1 DEC PDP8E         1974
        LIBERTY BAPTIST COLLEGE
                                                0 UNKNOWN
   WASHINGTON
        BIG BEND CMTY COLLEGE
                  COMP SCIENCE                  0 REMCON 2775
        COLUMBIA BASIN CC
                  COMPUTER SCIENCES             1 HON 2030A         1974
        GONZAGA UNIVERSITY
                  COMPUTER CENTER               1 IBM 360/30        1972
        PACIFIC LUTH UNIVERSITY
                                                1 UNI 70/46
        SEATTLE PACIFIC UNIVERSITY
                  COMPUTER SERVICES             1 DEC PDP1150       1971
        SAINT MARTIN'S COLLEGE
                  REGISTRARS OFFIC.             0 UNKNOWN
        TACOMA COMMUNITY COLLEGE
                  COMPUTER COORDINATING COMM.   0 IBM 360/67
                                                0 IBM 360/65
                                                0 UNI 70/7
                  FINANCIAL & STUDENT INFORM.   0 UNI 70/7
        PUGET SOUND, UNIVERSITY OF
                  COMPUTER SERVICES             1 DEC PDP1170       1976
        WASHINGTON, UNIVERSITY OF
                  ACADEMIC COMPUTER CENTER      1 CDC 6400          1969   2 PRI 200      3 HEP 2000
                                                1 CDC CY673         1973   4 PRI 300      1 HEP 3000
                  ADMIN DATA PROCESSING         1 BUR 6700          1973   1 PRI 400      1 HEP 5451
                  MANAGEMENT SYSTEMS            1 CAU LS12/20              5 RAY 704      2 HON 516
                  16 DEC PDP11    1 DEC PDP15   6 DAG NOVA                 2 VAR 620      4 IBM 1130
                   5 DEC PDP12   13 DEC PDP8    3 DAG NOVA800              1 XDS SIGMA5   2 IBM 360/
                                                1 DEC 10                   1 GAM SPC16    1 INT 8/32
                                                QTY MFGR MODEL  DC  YR INSTAL

WASHINGTON                  (CONTINUED)
     WASHINGTON ST UNIVERSITY
               ACADEMIC SERVICES                  1 DEC PDP1134       1976
                                                  1 EAI 640           1967
                                                  1 EAI 680           1967
                                                  1 EAI 693           1970
                                                  1 PRI 300           1976
                                                  1 MCN 11            1972
                                                  1 DEC PDP1520       1970
               COMPUTING CENTER                   1 IBM 360/67        1966
                                                  1 IBM 360/65        1976
     WESTERN WASH UNIV
               COMPUTER CENTER                    1 IBM 360/40        1968
                                                  3 INT 7/32          1974
                                                  3 INT 70            1974
                                                  1 INT 74            1975
                                                  0 CDC 6400
     YAKIMA VALLEY COLLEGE
               DATA PROCESSING                    0 UNKNOWN
     EDMONDS COMMUNITY COLLEGE
                                                  0 UNKNOWN
     EVERGREEN STATE COLLEGE
               COMPUTER SERVICES                  0 IBM 370/158
     NORTH SEATTLE CC
               DATA PROCESSING DEPARTMENT         1 PRI 300           1977
                                                  1 DEC PDP8          1975
     SEATTLE CC CENTRAL CAMPUS
               BUSINESS & COMMERCE DIV            1 PRI 300      T    1977
                                                  0 IBM 360/67
                                                  0 UNI 90/60
     SEATTLE CC SOUTH CAMPUS
               BUSINESS OFFICE                    0 UNKNOWN
               REGISTRAR                          0 UNKNOWN
     WHATCOM CMTY COLLEGE
                                                  0 UNI
     WASH ST CC DIST 17 OFF
                                                  1 UNI 9400
WEST VIRGINIA
     ALDERSON BROADDUS COLLEGE
               NATURAL SCIENCE DIVISION           1 DEC PDP8E         1972
     BETHANY COLLEGE
               COMPUTER CENTER                    1 IBM SYS3/10       1971
                                                  1 DAG NOVA          1969
     CONCORD COLLEGE
               COMPUTER CENTER                    1 DEC PDP1140       1976
                                                  1 DEC PDP8E         1970
     DAVIS AND ELKINS COLLEGE
               COMPUTER CENTER                    1 DEC PDP8E         1969
                                                  1 DEC PDP1134       1977
     FAIRMONT STATE COLLEGE
               COMPUTER CENTER                    0 IBM 360/75
                                                  0 IBM 370/148
                                                  1 DEC PDP1140       1976
     GLENVILLE STATE COLLEGE
               COMPUTER CENTER                    1 DEC PDP1140 T     1976
                                                  0 IBM 360/75
                                                  0 IBM 370/148
     MARSHALL UNIVERSITY
               COMPUTER CENTER                    0 IBM 360/75
                                                  0 IBM 370/148
                                                  1 DEC PDP1140 T     1975
     SOUTHERN W VA CC-LOGAN
               INSTITUTIONAL RESEARCH             0 UNKNOWN
     STHN W VA CC WILLIAMSON
               INSTITUTIONAL RESEARCH             0 UNKNOWN
     MORRIS HARVEY COLLEGE
               DATA PROCESSING DEPT               1 NCR 100
     SALEM COLLEGE
               MATHEMATICS DEPT                   1 DEC PDP8E         1969
     SHEPHERD COLLEGE
               DATA PROCESSING CENTER             1 DEC PDP1140 T     1975
                                                  0 IBM 360/75
                                                  0 IBM 370/148
     WEST LIBERTY ST COLLEGE
               COMPUTER CENTER                    1 DEC PDP1140       1976
     WEST VA INST TECHNOLOGY
               COMPUTER CENTER                    1 DEC PDP1140 T     1976
                                                  1 IBM 1130
     POTOMAC STATE COLLEGE
               COMPUTER CENTER                    1 DEC PDP1140 T     1975
                                                  0 IBM 370/148
                                                  1 TEK 4051          1977
     WEST VA WESLEYAN COLLEGE
               COMPUTER CENTER                    1 NCR 101           1972
     W VA COLLEGE GRAD STUDIES
               ENG & PHYSICAL SC DIV              1 DEC PDP1140 T     1977
                                                  1 DCN 88       T    1976
```

```
                                            QTY MFGR MODEL  DC  YR INSTAL

WEST VIRGINIA           (CONTINUED)
    APPALACHIAN BIBLE INST
              ACCOUNTING DEPT                 1 NCR 399           1973
    WEST VIRGINIA NORTHERN CC
              COMPUTER SERVICES               1 DEC PDP1140 T     1976
                                              0 IBM 360/75
                                              0 IBM 370/148
    SOUTHERN W VA CC CEN OFF
              INSTITUTIONAL RESEARCH          0 DEC PDP11
WISCONSIN
    ALVERNO COLLEGE
              DATA PROCESSING DEPT            0 UNKNOWN
    BELOIT COLLEGE
              ACCOUNTING                      1 NCR 399           1973
              COMPUTER CENTER                 1 IBM 1800          1967
              PHYSIC DEPT.                    1 DEC PDP8E         1976
    CARDINAL STRITCH COLLEGE
              MATHEMATICS DEPT.               0 DEC PDP8E   T     1975
                                              0 XDS SIGMA9  T     1977
    CARROLL COLLEGE
              COMPUTER SCIENCE DEPT.          1 GAP 18/30
    CARTHAGE COLLEGE
              COMPUTER SERVICE                0 HEP 2000
    WESTERN WIS TECH INST
              COMPUTER SERVICES               1 DEC PDP2040       1976
                                              1 DEC PDP8A         1975
    CONCORDIA COLLEGE
              DATA PROCESSING                 1 IBM SYS32         1976
    MARQUETTE UNIVERSITY
              COMPUTER SERVICES DIVISION      1 XDS               1974
    MILWAUKEE AREA TECH C
              DATA PROCESSING CENTER          1 HON 6060          1973
    MOUNT MARY COLLEGE
              MATHEMATICS DEPT                1 HEP 9830A         1974
    NORTHLAND COLLEGE
              NATURAL SCIENCES                1 HEP 9100          1973
                                              1 WAN 2200          1976
    SAINT NORBERT COLLEGE
              COMPUTER CENTER                 1 GAM 18/30         1974
    U OF WISCONSIN
              SPACE SCI & ENGINEERING CTR     1 HAR 6024/5        1972
              COMPUTER INSTR. & CONTROL LAB   1 DEC PDP1140       1973
                                              1 DEC PDP1120 T     1971
                                              1 DEC GT40    T     1975
              COMPUTER SCIENCES DEPT          3 DEC PDP11         1971
                                              1 HAR 6024/3        1971
              MADISON ACAD COMP CENTER        1 DEC PDP1170       1977
                                              1 UNI 1110          1974
                                              1 DEC PDP1575       1974
              CHEMICAL ENGINEERING            1 DEC PDP1155       1976
              WAISMAN CTR RES COMP FAC        1 HAR 6024/5  T     1973
                                              1 DEC PDP12   T     1972
                                              3 DEC LSI11   T     1976
                                              2 DEC LINC    T     1969
              NUCLEAR PHYSICS GROUP           1 HON 124           1967
              DEPTS. OF ZOOLOGY & BOTANY      1 HAR 6024/5        1974
              ENGINEERING COMPUTING LAB.      1 HAR 6024/6        1977
                                              1 HAR 6024/3  T     1971
              R & D CENTER COMP SERVICES      1 HAR 6024/5  T     1973
                                              1 DEC PDP11   T     1976
                                              1 ALT 8800A   T     1976
              V. W. CHEMISTRY DEPT            1 HAR SLASH7        1976
                                              1 DEC PDP1155       1977
              GEOPHYSICS COMPUTER FACILITY    1 HAR 6024/3        1971
              ARC-COL OF AGR - BIOCHEMISTRY   1 DEC PDP1135 T     1976
              DEPT OF NEUROPHYSIOLOGY         1 HAR 6024/5        1972
              LABORATORY COMPUTER FACILITY    1 HAR 6024/5        1971
                                              1 PRI 400           1976
                                              1 DEC PDP12         1969
                                              2 DEC LINC/8        1967
    WISCONSIN MILWAUKEE, U OF
              COMPUTING SERVICES DIVISION     1 UNI 1106          1974
                                              1 IBM 360/50        1976
                                              2 UNI 9200    T
                                              1 UNI 9300    T
                                              1 DEC GT46          1977
                                              0 UNI 1110
    VITERBO COLLEGE
              COMPUTER PORT                   1 HEP 2000    T     1972
    WISCONSIN EAU CLAIRE, U OF
              INFO SYS & COMPUTING SERV       2 BUR 5700          1974
                                              1 BUR 4700          1974
                                              1 BUR 9700          1977
                                              1 BUR 3000          1971
                                              1 DEC PDP1134       1976
                                              QTY MFGR MODEL  DC  YR INSTAL

   WISCONSIN              (CONTINUED)
      WISCONSIN LA CROSSE, U OF
               COMP AND MGMT INFO SERVICES     1 BUR 2700          1974
                                               1 HEP 2000          1972
                                               1 HEP 2000          1975
                                               1 HEP 3000          1976
                                               1 UNI 1110
      WISCONSIN PLATTEVL, U OF
               COMPUTER CENTER                 1 HON 2020          1973
                                               1 DEC PDP1140       1973
                                               1 IBM 1130          1968
      WISCONSIN STEVNS PNT, U OF
               COMPUTING SERVICES              1 BUR 6700          1976
      WISCONSIN SUPERIOR, U OF
               DATA PROCESSING CENTER          1 HON 2020          1971
               INSTRUCTIONAL COMPUTING RES.    1 DEC PDP1170       1976
      WISCONSIN WHITEWATER, U OF
               UW-W COMPUTER CENTER            1 IBM 370/138       1977
                                               1 HEP 2000          1976
                                               1 DEC PDP1145       1971
      MADISON AREA TECH COLLEGE
               DATA PROCESSING                 1 UNI 90/60         1977
                                               1 UNI 1900          1975
      INSTITUTE PAPER CHEMISTRY
               MACHINE COMPUTATION CENTER      1 IBM 360/44        1968
      WISCONSIN PARKSIDE, U OF
               COMPUTER CENTER                 1 IBM 370/135       1972
                                               1 HEP 2000          1976
                                               1 UNI TECH     T    1974
                                               1 DEC PDP8          1970
                                               1 DEC PDP1120       1970
                                               1 DAG NOV1210       1972
                                               1 DAG NOV1220       1972
      DISTRICT ONE TECH INST
               DATA PROCESSING DEPT            1 BUR 2700          1975
                                               1 DEC PDP8          1971
                                               1 DEC PDP8          1970
                                               2 BUR 3000          1973
      MID-STATE TECHNICAL INST
               DATA PROCESSING DEPT            1 NCR 100           1976
      NORTH CENTRAL TECH INST
               BUSINESS EDUCATION DEPT         1 IBM 370/115       1973
      STHWST WIS VOC TECH INST
               DATA PROCESSING                 1 BUR 1712          1974
      MEDICAL COLLEGE OF WIS
               COMPUTER CENTER                 1 DEC PDP12         1970
                                               1 DEC PDP12A        1973
                                               1 CAU LSI16         1976
                                               1 DEC PDP1140       1975
                                               1 WAN               1974
                                               1 DEC PDP1134       1977
                                               1 IBM 370/135       1973
      NORTHEAST WIS TECH INST
                                               1 IBM 360/40        1967
      WISCONSIN OSHKOSH, U OF
               COMPUTER SCIENCE DEPARTMENT     1 DEC PDP1145       1973
                                               1 DEC PDP8L         1976
                                               1 DEC PDP1105       1977
               COMPUTER SERVICES               1 IBM 370/145       1972
               PHYSICS                         3 TEK 4051     T    1976
                                               1 DEC PDP8L         1972
      SNT FRANCIS DE SALES C
                                               0 UNKNOWN
      FOX VALLEY TECH INST
               ADMIN DATA PROCESSING           1 IBM 370/125       1973
                                               1 IBM 370/138       1977
   WYOMING
      EASTERN WYOMING COLLEGE
                                               0 UNKNOWN
      SHERIDAN COLLEGE
               COMPUTER CENTER                 1 IBM 1130          1972
      NORTHWEST CMTY COLLEGE
               NWCC COMPUTER CENTER            1 DEC PDP1140       1974
      WYOMING, UNIVERSITY OF
               COMPUTER SERVICES DIVISION      1 XDS SIGMA7        1971
                                               3 MIC 1600          1975
      WESTERN WYO CMTY COLLEGE
               COMPUTER SERVICES               1 BUR 1714          1975
      CENTRAL WYOMING COLLEGE
               BUSINESS & INDUSTRY             0 UNKNOWN
   U. S. SERVICE SCHOOLS
      US COAST GUARD ACADEMY
               COMPUTING CENTER                1 GEC GE225         1969
      US MILITARY ACADEMY
               ACADEMIC COMPUTER CENTER        1 HON 6080          1977
                                               2 HON 701      T    1977
                                               2 IPLACGRAPH   T    1975
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

```
                                                      QTY MFGR MODEL  DC  YR INSTAL

U. S. SERVICE SCHOOLS     (CONTINUED)
    AIR FORCE, CC OF THE
                                                        0 HON 6060
SAMOA
    AMER SAMOA CMTY COLLEGE
                                                        0 IBM SYS3/10
GUAM
    GUAM, UNIVERSITY OF
                   COMPUTER CENTER                      1 IBM SYS3/10       1972
PUERTO RICO
    CATHOLIC U PUERTO RICO
                   COMPUTER CENTER                      0 NCR 50            1974
    SACRED HEART, COLLEGE OF
                                                        0 UNKNOWN
    INTER AMER U HATO REY CAM
                   INTER AMERICAN UNIVERSITY            1 IBM SYS32         1975
                                                        1 IBM SYS10         1974
    PUERTO RICO CENTRAL OFF, U
                   COMPUTER CENTER (CUC)                1 DAG C/300         1976
    PR MAYAGUEZ, U OF
                   CENTRO DE COMPUTOS                   1 DEC 10            1972
    PR MEDICAL SCIENCES, U OF
                   INFORMATION SYSTEMS                  1 DEC PDP1134       1977
    WORLD UNIVERSITY
                   COMPUTER SCIENCE DIVISION            1 DAG NOVA3         1977
VIRGIN ISLANDS
    VIRGIN ISLANDS, COLLEGE OF
                   COMPUTER CENTER                      1 IBM SYS3/10       1974
```

III. EXPENDITURES AND SOURCES OF SUPPORT

1. Expenditures

When comparing expenditure or cost estimates for computers in higher education from different sources, there are several cost elements which may or may not have been included at any given time due to policy changes or instructions in any given study and due to differences in the intent and purposes of the different studies. The following are among such elements:

a. Indirect Costs or Overhead
b. Manufacturers' Discounts
c. Administrative Uses of Computers
d. Depreciation of Purchased Equipment
e. Research and Development (may be shifting from computer center to computer science or other department)
f. Instruction Salaries
g. Computer Services to Others Outside the Institution

The estimates shown in Table III - 1:

a. do contain a 20 percent of direct costs item as an estimate of indirect costs.
b. do not contain any allowance for manufacturers' discounts (estimated to have been 30-40 million),
c. do include costs for administrative uses of computers,
d. do not contain depreciation amounts on purchased equipment or buildings,
e. do not include expenditures for instructional departments in computer sciences, etc., except for computer services supplied to those departments, and
f. do include services to those outside the institution.

The computations in Table III-1 for the elementary groups were carried out in accordance with the method outlined in Section I. The estimates of expenditures for the major groupings were obtained by combining the estimates for the appropriate elementary groups. All estimates were rounded to the nearest one-tenth of a million.

2. Sources of Support

Each installation was asked to report on FORM 1 the total income during 1976-77 from the parent institution, federal agencies, state, other and Off-Campus Service Income.

Population estimates for the amount of support supplied by "Institution", "Total Federal", and "Other" were computed and presented in Table III-1.

3. Distribution of Expenditures

An estimated 27 percent of the reported expenditures were for on campus instructional uses of the computing facilities. (see Figure III-1). Approximately 22 percent was for research and 45 percent for institution administration. In dollar amounts these estimates are roughly 268 million for instruction, 218 million for research and 446 million for administration. The remaining 6 percent or $59 million dollars included services to other educational institutions (estimated to be 2%) and local industry and government agencies (4%).

The above estimates were obtained by assigning costs to the four categories on the basis of percentage of computer use. An overall percentage distribution estimate was made for multi-computer installations. The percentage figures reported above are probably accurate within five percent.

4. Trends in Total Expenditures

Data from the three inventories provide fairly good estimates of total expenditures for nine fiscal years (FY '66 through FY '71 and FY '76 through FY '78). The following method was used to obtain the fiscal year estimates:

a. 20% was added to reported totals as an estimate of indirect costs.

b. Initial population estimates were obtained by multiplying the reported totals by N_i/n_i, I=1,2, where N_1=numberof institutions to which forms were mailed for the 1966-67 inventory and n_1=the number of institutions responding to the 1966-67

Table III-1

Estimates of 1976-77 Expenditures for Computers in Institutions of Higher Education by Source

(Millions of Dollars)

Group	Total No. Institutions	Institutions*	All Federal*	Other*	Total**
All Institutions	3136	780.2	68.5	101.8	991.1
Control:					
Public	1509	569.9	40.2	87.8	719.9
Private	1627	210.3	28.3	14.0	271.2
Highest Level of Offering:					
Associate Degree	1196	130.3	2.0	16.5	155.9
Bachelor's Degree	801	41.4	4.1	2.9	50.1
Master's Degree	717	125.8	2.6	7.6	146.0
Doctorate	422	482.6	59.8	74.8	639.1
Enrollment (Fall 1975) Class:					
Below 500	662	6.0	.2	.1	6.5
500 -- 2,499	1382	102.7	9.8	10.6	130.3
2,500 -- 9,999	775	252.0	14.7	24.4	315.0
10,000 -- 19,999	205	148.1	14.2	24.7	189.2
20,000 and above	112	271.4	29.6	42.0	350.1
Control and Level:					
Public, Associate	937	127.2	2.0	16.5	152.5
Bachelor's	97	17.6	2.0	.7	20.6
Master's	268	89.0	.9	6.3	103.5
Doctorate	207	336.1	35.3	64.3	443.2
Private, Associate	259	3.1	.0	.0	3.4
Bachelor's	704	23.8	2.1	2.2	29.5
Master's	449	36.8	1.7	1.3	42.5
Doctorate	215	146.6	24.5	10.5	195.9
Control and Enrollment Class:					
Public, Below 500	69	2.0	.0	.0	2.0
500 -- 2,499	570	53.6	4.1	7.3	68.7
2,500 -- 9,999	583	163.3	2.9	17.7	189.8
10,000 -- 19,999	184	114.6	6.0	21.5	145.8
20,000 and above	103	236.3	27.2	41.2	313.6
Private, Below 500	593	3.9	.2	.1	4.5
500 -- 2,499	812	49.1	5.7	3.3	61.6
2,500 -- 9,999	192	88.7	11.8	6.7	125.2
10,000 -- 19,999	21	33.5	8.2	3.1	43.4
20,000 and above	9	35.0	2.4	.8	36.5
Level and Enrollment Class:					
Associate, Below 500	213	1.9	.1	.0	2.2
500 -- 2,499	538	19.9	1.3	1.4	23.9
2,500 -- 9,999	340	65.5	2.3	6.6	74.0
10,000 -- 19,999	82	23.9	.3	6.1	34.6
20,000 and above	23	19.1	.1	2.4	21.3
Bachelor's, Below 500	226	.8	.1	.1	1.0
500 -- 2,499	513	24.4	3.8	2.5	32.1
2,500 -- 9,999	60	16.1	.2	.4	17.0
10,000 -- 19,999	2	.0	.0	.0	.0
20,000 and above	0	---	---	---	---
Master's, Below 500	148	1.4	.0	.0	1.5
500 -- 2,499	259	19.9	2.0	.3	23.2
2,500 -- 9,999	261	73.4	.4	4.9	84.2
10,000 -- 19,999	40	25.4	.1	2.2	28.4
20,000 and above	9	5.7	.0	.1	8.8

Table III-1
(cont'd)

Estimates of 1976-77 Expenditures for Computers
in
Institutions of Higher Education by Source

(Millions of Dollars)

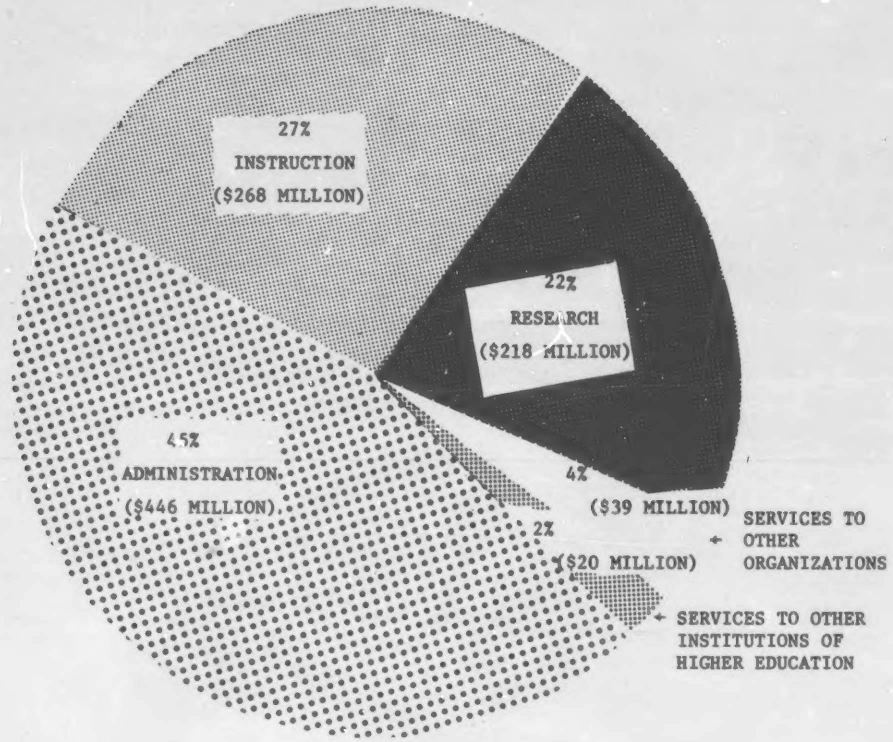
Group	Total No. Institutions	Insti-tutions*	All Federal*	Other*	Total**
Level and Enrollment Class: Cont'd.					
Doctorate, Below 500	75	1.8	.0	.0	1.9
500 -- 2,499	72	38.5	2.6	6.4	51.0
2,500 -- 9,999	114	96.9	13.9	12.6	139.9
10,000 -- 19,999	81	98.8	13.8	16.3	126.3
20,000 and above	80	246.6	29.5	38.5	320.0
Control, Level and Enrollment Class: (Elementary Group)					
Public, Associate, Below 500	52	.3	.0	.0	.3
500 -- 2,499	448	19.0	1.3	1.4	22.9
2,500 -- 9,999	332	65.0	.2	6.6	73.5
10,000 -- 19,999	82	23.9	.3	6.1	34.5
20.000 and above	23	19.1	.1	2.4	21.3
Bachelor's, Below 500	4	.0	.0	.0	.0
500 -- 2,499	55	5.0	1.8	.4	7.5
2,500 -- 9,999	36	12.0	.2	.4	13.2
10,000 -- 19,999	2	.0	.0	.0	.0
20,000 and above	0	---	---	---	---
Master's, Below 500	11	.4	.0	.0	.3
500 -- 2,499	39	5.6	.5	.1	7.2
2,500 -- 9,999	172	53.8	.3	3.8	60.7
10,000 -- 19,999	37	23.6	.1	2.2	26.5
20,000 and above	9	5.7	.0	.1	8.8
Doctorate, Below 500	2	1.3	.0	.0	1.3
500 -- 2,499	28	24.0	.5	5.4	31.1
2,500 -- 9,999	43	32.0	2.2	6.9	42.4
10,000 -- 19,999	63	67.1	5.6	13.2	84.8
20,000 and above	71	211.6	27.1	38.7	283.5
Private, Associate, Below 500	161	1.6	.0	.0	1.9
500 -- 2,499	90	1.0	.0	.0	1.0
2,500 -- 9,999	8	.5	.0	.0	.5
10,000 -- 19,999	0	---	---	---	---
20,000 and above	0	---	---	---	---
Bachelor's, Below 500	222	.8	.1	.1	1.0
500 -- 2,499	458	19.4	2.0	2.1	24.6
2,500 -- 9,999	24	3.6	.0	.0	3.8
10,000 -- 19,999	0	---	---	---	---
20,000 and above	0	---	---	---	---
Master's, Below 500	137	1.0	.0	.0	1.1
500 -- 2,499	220	14.3	1.5	.2	16.0
2,500 -- 9,999	89	19.7	.1	1.1	23.4
10,000 -- 19,999	3	1.8	.1	.0	1.9
20,000 and above	0	---	---	---	---
Doctorate, Below 500	73	.5	.0	.0	.5
500 -- 2,499	44	14.4	2.2	1.0	19.9
2,500 -- 9,999	71	65.0	11.7	5.6	97.5
10,000 -- 19,999	18	31.7	8.2	3.1	41.5
20,000 and above	9	35.0	2.4	.8	36.5

*Computed from "INCOME"

**Computed Independently from Expenditures

Figure III-1

Estimated Distribution of Expenditures for Instruction,
Research and Administrative Uses of Computers in U.S. Higher Education
1976-77



)

inventory ($N_1/n_1=1.25$), N_2=number of institutions to which forms were sent for the 1969-70 inventory and n_2=number of institutions which responded to the 1969-70 inventory ($N_2/n_2=1.33$), etc.

c. Estimates for 1966-67 and 1969-70 had already been obtained by more accurate methods (221 million and 472 million, respectively). As expected the estimates for these years which were obtained in (b) were too high. The percentage of overestimate was computed, 8% and 15 1/2% respectively, and the percent of overestimate was assumed to decrease by 2 1/2% from FY '71 to FY '68 and by 1% from FY '68 to FY '66. The final estimates are shown in Table III-2.

More appropriate (statistically) estimates can be obtained by applying the method outlined in Chapter I. However it is doubtful that the final results would differ by more than one or two percent and the calculations required would be quite tedious. As a check point we have the following independent comparisons:

a. From the 1964-65 sample survey an estimate of $103 million was obtained for FY '65 as compared to the $104 million obtained above.

b. FY '68 was included in both inventories. The above method applied to the data from the 1966-67 inventory produced an estimate of 274 million as compared to 260 million from the 1969-70 inventory. Since the data for the 1966-67 inventory was collected near the end of FY '68 the 274 million figure was assumed to be the most accurate.

Using the nine estimated total expenditures for FY '66 through FY '68 and FY '76 through FY '78 a good least squares linear fit was obtained. Figure III-2 shows the estimates and the best fitting line $Y=-168.36+75.818X$ extended through FY '83.

Table III-2

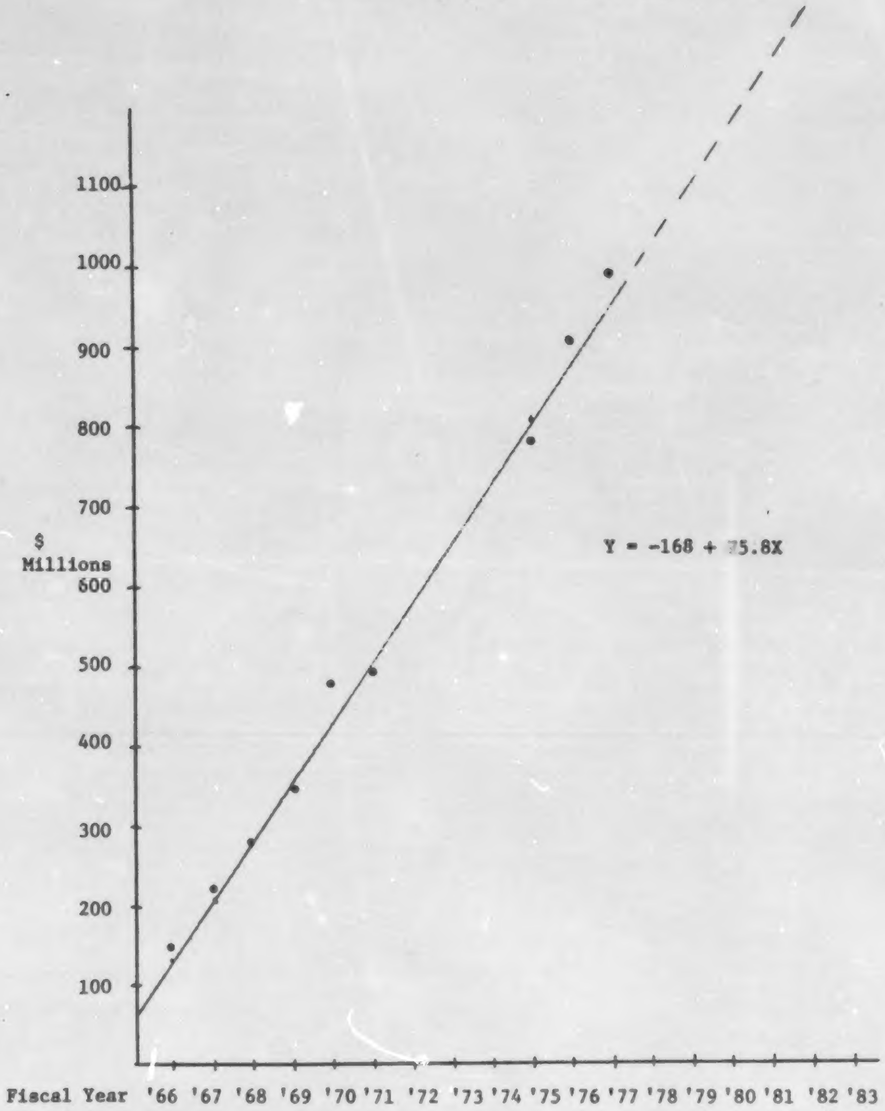
Estimated Total Expenditures for Computing in U.S.
Higher Education for Fiscal Years '63 through '85

Source	Fiscal Year	Reported Totals (Thousands)	N/n	Estimate (Millions)
1966-67 Inventory	'63*	35,613	1.25	51
	'64*	51,846	1.25	74
	'65*	73,813	1.25	104
	'66	102,399	1.25	144
	'67	158,860	1.25	221
	'68	199,047	1.25	274
1969-70 Inventory	'69	243,329	1.33	344
	'70	341,613	1.33	472
	'71	365,201	1.33	494
	'72	-	-	590
	'73	-	-	666
	'74	-	-	742
1976-77 Inventory	'75	378,950	1.72	782
	'76	437,835	1.72	904
	'77	512,646	1.72	991**
$Y=-168+75.8X$ $R^2=.99$	'78	-	-	1045
	'79	-	-	1121
	'80	-	-	1196
	'81	-	-	1272
	'82	-	-	1348
	'83	-	-	1424
	'84	-	-	1500
	'85	-	-	1575

*not used to obtain fit

**from Table III-1

Figure III-2
Estimated Total Expenditures for Computing
in U.S. Higher Education Through FY 1983



IV Computer Installations by Type of Usage and Title of Office to Whom Head of Installation Reports

1. Type of Usage

Twelve hundred forty eight institutions reported 1599 administratively independent installations. Thirteen hundred seventeen (1317) of these installations had some kind of computer. For each computer in each installation the percentage of the total utilization was reported for research, instruction, administration, service to other institutions of higher education and other. The installations with computers were separated into six groups as follows:

1. All computers in the installation were used for instruction only.
2. All computers in the installation were used for research only.
3. All computers in the installation were used for administration only. (ADM ONLY)
4. At least one computer was used for both research and instruction but none for administration (NO ADM, or RES/INSTR)
5. At least one computer was used for research and/or instruction and administration (ADM/RES/INSTR, or MIXED)
6. NO CLASSIF (Usually machines not yet installed or at least not long enough for usage to be reported.

2. Title of Officer to Whom Head Reports by Type of Usage of Center

The title of the position to which the head of each installation reported was also given and coded. The coding was done on the basis of the following general titles:

0. Not applicable (new computer)
1. Head, institution or campus (president, chancellor, etc.)
2. Head of computer facilities
3. Chief academic officer
4. Dean, engineering or technology
5. Dean, other
6. Research head
7. Department head (Academic)
8. Chief business officer
9. Other business officer
10. Other
11. Unknown

Summaries for the groupings based upon the three characteristics (control: public and private; highest level of offering: associate, bachelor's, master's, doctorate; Enrollment: under 2,500, 2500-10,000, over 10,000) follow on pages IV-3 through IV-14. Table IV-1 below gives the numbers of installations with computers for each type of usage and each major grouping of institutions. These are counts of those reporting and have not been extrapolated for the population.

Table IV-1

Reported Numbers of Installations with Computers by Classes of Institutions and Type of Usage

Class of Institutions	Type of Usage				
	INSTR. ONLY	RES. ONLY	ADMIN. ONLY	RES. & INSTR.	RES. ADMIN. & INSTR.
ALL	75	58	102	127	887
PUBLIC	30	48	58	82	567
PRIVATE	45	10	44	45	320
PUBLIC, ASSOCIATE	20	0	14	4	246
PUBLIC, BACHELOR'S	2	1	1	3	38
PUBLIC, MASTER'S	4	0	7	15	123
PUBLIC, DOCTORATE	4	47	36	60	160
PRIVATE, ASSOCIATE	4	0	1	2	12
PRIVATE, BACHELOR'S	26	0	16	14	122
PRIVATE, MASTER'S	10	1	14	13	103
PRIVATE, DOCTORATE	5	9	13	16	83
ASSOCIATE	24	0	15	6	258
BACHELOR'S	28	1	17	17	160
MASTER'S	14	1	21	28	226
DOCTORATE	9	56	49	76	243
PUBLIC, BELOW 2,500	8	1	15	4	143
PUBLIC, 2,500-10,000	11	1	11	17	239
PUBLIC, OVER 10,000	11	46	32	61	185
PRIVATE, BELOW 2,500	37	1	31	25	202
PRIVATE, 2,500-10,000	7	2	11	15	89
PRIVATE, OVER 10,000	1	7	2	5	29
BELOW 2,500	45	2	46	29	345
2,500-10,000	18	3	22	32	328
OVER 10,000	12	53	34	66	214

TITLE OF OFFICE TO WHOM HEAD OF INSTALLATION REPORTS BY TYPE OF USAGE

GROUP (PUBLIC , ASSOCIATE, BELOW 2500) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 114

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	1	30	0	0	0	31
02	HEAD OF COMPUTER FACILITIES	0	0	0	0	0	0	0
03	CHIEF ACADEMIC OFFICER	1	0	13	0	2	2	18
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	0	0	16	0	2	0	18
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	0	0	1	0	0	0	1
08	CHIEF BUSINESS OFFICER	0	5	20	0	0	1	26
09	OTHER BUSINESS OFFICER	0	0	1	0	0	0	1
10	OTHER	1	1	3	0	1	1	7
11	UNKNOWN	0	2	10	0	0	0	12
	GROUP TOTAL BY USAGE	2	9	94	0	5	4	114

GROUP (PUBLIC , ASSOCIATE, 2500-10000) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 132

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	0	39	0	0	1	40
02	HEAD OF COMPUTER FACILITIES	0	0	3	0	3	0	6
03	CHIEF ACADEMIC OFFICER	0	0	13	0	0	0	13
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	1	0	7	0	2	0	10
06	RESEARCH HEAD	0	0	1	0	0	0	1
07	DEPARTMENT HEAD	0	0	2	0	1	1	4
08	CHIEF BUSINESS OFFICER	0	4	42	0	0	1	47
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	5	0	1	0	6
11	UNKNOWN	0	0	2	0	1	2	5
	GROUP TOTAL BY USAGE	1	4	114	0	8	5	132

GROUP (PUBLIC , ASSOCIATE, OVER 10000) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 47

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	0	9	0	0	0	9
02	HEAD OF COMPUTER FACILITIES	0	0	0	0	0	0	0
03	CHIEF ACADEMIC OFFICER	0	0	3	0	3	0	6
04	DEAN, ENGINEERING OR TECH	0	1	1	0	0	0	2
05	DEAN, OTHER	1	0	1	0	2	0	4
06	RESEARCH HEAD	0	0	1	0	0	0	1
07	DEPARTMENT HEAD	0	0	0	0	1	0	1
08	CHIEF BUSINESS OFFICER	0	0	14	0	0	0	14
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	6	0	0	0	6
11	UNKNOWN	0	0	3	0	1	0	4
	GROUP TOTAL BY USAGE	1	1	38	0	7	0	47

GROUP (PUBLIC , ASSOCIATE,) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 293

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	1	78	0	0	1	80
02	HEAD OF COMPUTER FACILITIES	0	0	3	0	3	0	6
03	CHIEF ACADEMIC OFFICER	1	0	29	0	5	2	37
04	DEAN, ENGINEERING OR TECH	0	1	1	0	0	0	2
05	DEAN, OTHER	2	0	24	0	6	0	32
06	RESEARCH HEAD	0	0	2	0	0	0	2
07	DEPARTMENT HEAD	0	0	3	0	2	1	6
08	CHIEF BUSINESS OFFICER	0	9	76	0	0	2	87
09	OTHER BUSINESS OFFICER	0	0	1	0	0	0	1
10	OTHER	1	1	14	0	2	1	19
11	UNKNOWN	0	2	15	0	2	2	21
	GROUP TOTAL BY USAGE	4	14	246	0	20	9	293

GROUP (PUBLIC , BACHELORS, BELOW 2500) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 27

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	0	3	0	0	0	[illegible]
02	HEAD OF COMPUTER FACILITIES	0	0	1	0	0	0	[illegible]
03	CHIEF ACADEMIC OFFICER	0	1	6	0	1	1	9
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	0	0	0	0	0	0	0
06	RESEARCH HEAD	0	0	2	0	0	0	2
07	DEPARTMENT HEAD	0	0	0	1	0	1	2
08	CHIEF BUSINESS OFFICER	1	0	7	0	0	0	8
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	1	0	0	0	1
11	UNKNOWN	0	0	1	0	0	0	1
	GROUP TOTAL BY USAGE	1	1	21	1	1	2	27

INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

TITLE OF OFFICE TO WHOM HEAD OF INSTALLATION REPORTS BY TYPE OF USAGE

GROUP (PUBLIC , BACHELORS, 2500-10000)   TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S)   21

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	0	4	0	0	0	4
02	HEAD OF COMPUTER FACILITIES	0	0	0	0	0	0	0
03	CHIEF ACADEMIC OFFICER	1	0	3	0	0	0	4
04	DEAN, ENGINEERING OR TECH	0	0	1	0	0	0	1
05	DEAN, OTHER	1	0	0	0	0	0	1
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	0	0	0	0	0	0	0
08	CHIEF BUSINESS OFFICER	0	0	4	0	0	0	4
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	2	0	0	0	2
11	UNKNOWN	0	0	3	0	1	1	5
	GROUP TOTAL BY USAGE	2	0	17	0	1	1	21

GROUP (PUBLIC , BACHELORS,   )   TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S)   48

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	0	7	0	0	0	7
02	HEAD OF COMPUTER FACILITIES	0	0	1	0	0	0	1
03	CHIEF ACADEMIC OFFICER	1	1	9	0	1	1	13
04	DEAN, ENGINEERING OR TECH	0	0	1	0	0	0	1
05	DEAN, OTHER	1	0	0	0	0	0	1
06	RESEARCH HEAD	0	0	2	0	0	0	2
07	DEPARTMENT HEAD	0	0	0	1	0	1	2
08	CHIEF BUSINESS OFFICER	1	0	11	0	0	0	12
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	3	0	0	0	3
11	UNKNOWN	0	0	4	0	1	1	6
	GROUP TOTAL BY USAGE	3	1	38	1	2	3	48

GROUP (PUBLIC , MASTERS , BELOW 2500)   TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S)   20

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	0	7	0	1	0	8
02	HEAD OF COMPUTER FACILITIES	0	0	0	0	0	0	0
03	CHIEF ACADEMIC OFFICER	0	0	4	0	0	1	5
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	0	0	1	0	0	0	1
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	0	0	0	0	1	0	1
08	CHIEF BUSINESS OFFICER	0	1	3	0	0	0	4
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	0	0	0	0	0
11	UNKNOWN	0	0	0	0	0	1	1
	GROUP TOTAL BY USAGE	0	1	15	0	2	2	20

GROUP (PUBLIC , MASTERS , 2500-10000)   TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S)   97

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	1	1	26	0	1	1	30
02	HEAD OF COMPUTER FACILITIES	2	0	5	0	0	0	7
03	CHIEF ACADEMIC OFFICER	3	0	13	0	0	0	16
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	0	0	2	0	0	0	2
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	0	0	2	0	1	0	3
08	CHIEF BUSINESS OFFICER	0	3	22	0	0	1	26
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	2	0	5	0	0	0	7
11	UNKNOWN	0	0	5	0	0	1	6
	GROUP TOTAL BY USAGE	8	4	80	0	2	3	97

GROUP (PUBLIC , MASTERS , OVER 10000)   TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S)   37

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	0	5	0	0	0	5
02	HEAD OF COMPUTER FACILITIES	0	0	0	0	0	0	0
03	CHIEF ACADEMIC OFFICER	2	0	2	0	0	0	4
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	1	0	2	0	0	0	3
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	2	0	0	0	0	0	2
08	CHIEF BUSINESS OFFICER	1	1	12	0	0	0	14
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	1	1	6	0	0	0	8
11	UNKNOWN	0	0	1	0	0	0	1
	GROUP TOTAL BY USAGE	7	2	28	0	0	0	37

TITLE OF OFFICE TO WHOM HEAD OF INSTALLATION REPORTS BY TYPE OF USAGE

GROUP (PUBLIC , MASTERS ,) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 154

CODE TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00 NOT APPLICABLE	0	0	0	0	0	0	0
01 HEAD, INSTITUTION OR CAMPUS	1	1	38	0	2	1	43
02 HEAD OF COMPUTER FACILITIES	2	0	5	0	0	0	7
03 CHIEF ACADEMIC OFFICER	5	0	19	0	0	1	25
04 DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05 DEAN, OTHER	1	0	5	0	0	0	6
06 RESEARCH HEAD	0	0	0	0	0	0	0
07 DEPARTMENT HEAD	2	0	2	0	2	0	6
08 CHIEF BUSINESS OFFICER	1	5	37	0	0	1	44
09 OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10 OTHER	3	1	11	0	0	0	15
11 UNKNOWN	0	0	6	0	0	2	8
GROUP TOTAL BY USAGE	15	7	123	0	4	5	154

GROUP (PUBLIC , DOCTORATE, BELOW 2500) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 19

CODE TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00 NOT APPLICABLE	0	0	0	0	0	0	0
01 HEAD, INSTITUTION OR CAMPUS	0	0	3	0	0	0	3
02 HEAD OF COMPUTER FACILITIES	1	0	2	0	0	0	3
03 CHIEF ACADEMIC OFFICER	0	0	2	0	0	0	2
04 DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05 DEAN, OTHER	0	0	0	0	0	0	0
06 RESEARCH HEAD	0	0	0	0	0	0	0
07 DEPARTMENT HEAD	0	0	0	0	0	0	0
08 CHIEF BUSINESS OFFICER	0	1	5	0	0	0	6
09 OTHER BUSINESS OFFICER	0	1	0	0	0	0	1
10 OTHER	0	1	1	0	0	1	3
11 UNKNOWN	0	1	0	0	0	0	1
GROUP TOTAL BY USAGE	1	4	13	0	0	1	19

GROUP (PUBLIC , DOCTORATE, 2500-10000) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 44

CODE TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00 NOT APPLICABLE	0	0	0	0	0	0	0
01 HEAD, INSTITUTION OR CAMPUS	0	0	6	0	0	3	11
02 HEAD OF COMPUTER FACILITIES	0	1	0	0	0	0	1
03 CHIEF ACADEMIC OFFICER	1	0	3	0	0	0	4
04 DEAN, ENGINEERING OR TECH	1	0	1	0	0	0	2
05 DEAN, OTHER	3	0	0	0	0	1	4
06 RESEARCH HEAD	0	0	3	1	0	0	4
07 DEPARTMENT HEAD	0	0	0	0	0	0	0
08 CHIEF BUSINESS OFFICER	1	1	10	0	0	2	14
09 OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10 OTHER	0	0	3	0	0	0	3
11 UNKNOWN	0	1	0	0	0	0	1
GROUP TOTAL BY USAGE	6	3	28	1	0	6	44

GROUP (PUBLIC , DOCTORATE, OVER 10000) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 272

CODE TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00 NOT APPLICABLE	0	0	0	0	0	0	0
01 HEAD, INSTITUTION OR CAMPUS	1	2	20	1	0	4	28
02 HEAD OF COMPUTER FACILITIES	2	4	9	3	1	1	20
03 CHIEF ACADEMIC OFFICER	4	2	16	0	0	1	23
04 DEAN, ENGINEERING OR TECH	7	0	6	2	1	0	16
05 DEAN, OTHER	11	0	13	6	0	2	32
06 RESEARCH HEAD	6	0	7	1	0	3	17
07 DEPARTMENT HEAD	15	1	10	18	0	4	48
08 CHIEF BUSINESS OFFICER	3	14	19	1	0	3	40
09 OTHER BUSINESS OFFICER	0	1	0	0	0	0	1
10 OTHER	4	4	15	5	1	1	30
11 UNKNOWN	0	1	4	9	1	2	17
GROUP TOTAL BY USAGE	53	29	119	46	4	21	272

GROUP (PUBLIC , DOCTORATE,) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 335

CODE TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00 NOT APPLICABLE	0	0	0	0	0	0	0
01 HEAD, INSTITUTION OR CAMPUS	1	2	31	1	0	7	42
02 HEAD OF COMPUTER FACILITIES	3	5	11	3	1	1	24
03 CHIEF ACADEMIC OFFICER	5	2	21	0	0	1	29
04 DEAN, ENGINEERING OR TECH	8	0	7	2	1	0	18
05 DEAN, OTHER	14	0	13	6	0	3	36
06 RESEARCH HEAD	6	0	10	2	0	3	21
07 DEPARTMENT HEAD	15	1	10	18	0	4	48
08 CHIEF BUSINESS OFFICER	4	16	34	1	0	5	60
09 OTHER BUSINESS OFFICER	0	2	0	0	0	0	2
10 OTHER	4	5	19	5	1	2	36
11 UNKNOWN	0	3	4	9	1	2	19
GROUP TOTAL BY USAGE	60	36	160	47	4	28	335

TITLE OF OFFICE TO WHOM HEAD OF INSTALLATION REPORTS BY TYPE OF USAGE

GROUP (PUBLIC , , BELCW 2500) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 180

CODE TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00 NOT APPLICABLE	0	0	0	0	0	0	0
01 HEAD, INSTITUTION OR CAMPUS	0	1	43	0	1	0	45
02 HEAD OF COMPLTER FACILITIES	1	0	3	0	0	0	4
03 CHIEF ACADEMIC UFFICER	1	1	25	0	3	4	34
04 DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05 DEAN, OTHER	0	0	17	0	2	0	19
06 RESEARCH HEAC	0	0	2	0	0	0	2
07 DEPARTMENT HEAD	0	0	1	1	1	1	4
08 CHIEF BUSINESS OFFICER	1	7	35	0	0	1	44
09 OTHER BUSINESS OFFICER	0	1	1	0	0	0	2
10 OTHER	1	2	5	0	1	2	11
11 UNKNOWN	0	3	11	0	0	1	15
GROUP TOTAL BY USAGE	4	15	143	1	8	9	180

GROUP (PUBLIC , , 2500-10000) TOTAL INSTALLATICNS IN GROUP WITH COMPUTER(S) 294

CODE TITLE	NO ADM	ADM ONLY	MIXEC *	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00 NOT APPLICABLE	0	0	0	0	0	0	0
01 HEAD, INSTITUTION OR CAMPUS	1	1	77	0	1	5	85
02 HEAD OF COMPUTER FACILITIES	2	1	8	0	3	0	14
03 CHIEF ACADEMIC OFFICER	5	0	32	0	0	0	37
04 DEAN, ENGINEERING OR TECH	1	0	2	0	0	0	3
05 DEAN, OTHER	5	0	9	0	2	1	17
06 RESEARCH HEAD	0	0	4	1	0	0	5
07 DEPARTMENT HEAD	0	0	4	0	2	1	7
08 CHIEF BUSINESS OFFICER	1	8	78	0	0	4	91
09 OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10 OTHER	2	0	15	0	1	0	18
11 UNKNOWN	0	1	10	0	2	4	17
GROUP TOTAL BY USAGE	17	11	239	1	11	15	294

GROUP (PUBLIC , , OVER 10000) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 356

CODE TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00 NOT APPLICABLE	0	0	0	0	0	0	0
01 HEAD, INSTITUTION OR CAMPUS	1	2	34	1	0	4	42
02 HEAD OF COMPUTER FACILITIES	2	4	9	3	1	1	20
03 CHIEF ACADEMIC OFFICER	6	2	21	0	3	1	33
04 DEAN, ENGINEERING CR TECH	7	1	7	2	1	0	18
05 DEAN, OTHER	13	0	16	6	2	2	39
06 RESEARCH HEAD	6	0	8	1	0	3	18
07 DEPARTMENT HEAC	17	1	10	18	1	4	51
08 CHIEF BUSINESS OFFICER	4	15	45	1	0	3	68
09 OTHER BUSINESS OFFICER	0	1	0	0	0	0	1
10 OTHER	5	5	27	5	1	1	44
11 UNKNOWN	0	1	8	9	2	2	22
GROUP TOTAL BY USAGE	61	32	185	46	11	21	356

GROUP (PUBLIC , ,) TOTAL INSTALLATICNS IN GROUP WITH CCMPUTER(S) 830

CODE TITLE	NO ADM	ADM UNLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00 NCT APPLICABLE	0	0	0	0	0	0	0
01 HEAD, INSTITUTION OR CAMPUS	2	4	154	1	2	9	172
02 HEAD OF COMPUTER FACILITIES	5	5	20	3	4	1	38
03 CHIEF ACADEMIC OFFICER	12	3	78	0	6	5	104
04 DEAN, ENGINEERING OR TECH	8	1	9	2	1	0	21
05 DEAN, CTHER	18	0	42	6	6	3	75
06 RESEARCH HEAD	6	0	14	2	0	3	25
07 DEPARTMENT HEAD	17	1	15	19	4	6	62
08 CHIEF BUSINESS OFFICER	6	30	158	1	0	8	203
09 OTHER BUSINESS OFFICER	0	2	1	0	0	0	3
10 OTHER	8	7	47	5	3	3	73
11 UNKNOWN	0	5	29	9	4	7	54
GROUP TOTAL BY USAGE	82	58	567	48	30	45	830

GROUP (PRIVATE, ASSOCIATE, BELOW 2500) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 18

CODE TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR UNLY	NO CLASSFY	TOTAL BY TITLE
00 NOT APPLICABLE	0	0	0	0	0	0	0
01 HEAD, INSTITUTION CR CAMPUS	0	0	4	0	0	0	4
02 HEAD OF COMPLTER FACILITIES	0	0	1	0	0	0	1
03 CHIEF ACADEMIC OFFICER	2	0	1	0	2	0	5
04 DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05 DEAN, OTHER	0	0	0	0	0	0	0
06 RESEARCH HEAC	0	0	0	0	0	0	0
07 DEPARTMENT HEAD	0	0	0	0	1	0	1
08 CHIEF BUSINESS OFFICER	0	1	3	0	0	0	4
09 OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10 OTHER	0	0	0	0	0	0	0
11 UNKNOWN	0	0	2	0	1	0	3
GROUP TOTAL BY USAGE	2	1	11	0	4	0	18

TITLE OF OFFICE TO WHOM HEAD OF INSTALLATION REPORTS BY TYPE OF USAGE

GROUP (PRIVATE, ASSOCIATE, 2500-10000) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 1

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	0	1	0	0	0	1
02	HEAD OF COMPUTER FACILITIES	0	0	0	0	0	0	0
03	CHIEF ACADEMIC OFFICER	0	0	0	0	0	0	0
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	0	0	0	0	0	0	0
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	0	0	0	0	0	0	0
08	CHIEF BUSINESS OFFICER	0	0	0	0	0	0	0
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	0	0	0	0	0
11	UNKNOWN	0	0	0	0	0	0	0
	GROUP TOTAL BY USAGE	0	0	1	0	0	0	1

GROUP (PRIVATE, ASSOCIATE,) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 19

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	0	5	0	0	0	5
02	HEAD OF COMPUTER FACILITIES	0	0	1	0	0	0	1
03	CHIEF ACADEMIC OFFICER	2	0	1	0	2	0	5
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	0	0	0	0	0	0	0
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	0	0	0	0	1	0	1
08	CHIEF BUSINESS OFFICER	0	1	3	0	0	0	4
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	0	0	0	0	0
11	UNKNOWN	0	0	2	0	1	0	3
	GROUP TOTAL BY USAGE	2	1	12	0	4	0	19

GROUP (PRIVATE, BACHELORS, BELOW 2500) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 175

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	3	3	15	0	0	1	22
02	HEAD OF COMPUTER FACILITIES	0	0	2	0	0	0	2
03	CHIEF ACADEMIC OFFICER	5	0	38	0	17	1	61
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	0	1	1	0	0	0	2
06	RESEARCH HEAD	0	0	2	0	0	1	3
07	DEPARTMENT HEAD	4	1	3	0	5	0	13
08	CHIEF BUSINESS OFFICER	1	9	41	0	0	1	52
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	3	0	0	0	3
11	UNKNOWN	0	1	9	0	4	3	17
	GROUP TOTAL BY USAGE	13	15	114	0	26	7	175

GROUP (PRIVATE, BACHELORS, 2500-10000) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 10

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	0	3	0	0	0	3
02	HEAD OF COMPUTER FACILITIES	0	0	0	0	0	0	0
03	CHIEF ACADEMIC OFFICER	1	0	2	0	0	0	3
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	0	0	0	0	0	0	0
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	0	0	0	0	0	0	0
08	CHIEF BUSINESS OFFICER	0	1	2	0	0	0	3
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	1	0	0	0	1
11	UNKNOWN	0	0	0	0	0	0	0
	GROUP TOTAL BY USAGE	1	1	8	0	0	0	10

GROUP (PRIVATE, BACHELORS,) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 185

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	3	3	18	0	0	1	25
02	HEAD OF COMPUTER FACILITIES	0	0	2	0	0	0	2
03	CHIEF ACADEMIC OFFICER	6	0	40	0	17	1	64
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	0	1	1	0	0	0	2
06	RESEARCH HEAD	0	0	2	0	0	1	3
07	DEPARTMENT HEAD	4	1	3	0	5	0	13
08	CHIEF BUSINESS OFFICER	1	10	43	0	0	1	55
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	4	0	0	0	4
11	UNKNOWN	0	1	9	0	4	3	17
	GROUP TOTAL BY USAGE	14	16	122	0	26	7	185

TITLE OF OFFICE TO WHOM HEAD OF INSTALLATION REPORTS BY TYPE OF USAGE

GROUP (PRIVATE, MASTERS , BELOW 2500) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 83

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	3	15	1	1	0	20
02	HEAD OF COMPUTER FACILITIES	1	0	1	0	0	0	2
03	CHIEF ACADEMIC OFFICER	2	0	19	0	4	2	27
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	2	0	2	0	1	0	5
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	2	0	0	0	1	0	3
08	CHIEF BUSINESS OFFICER	0	7	15	0	0	0	22
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	1	1	0	0	1	3
11	UNKNOWN	0	0	1	0	0	0	1
	GROUP TOTAL BY USAGE	7	11	54	1	7	3	83

GROUP (PRIVATE, MASTERS , 2500-10000) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 61

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	1	9	0	0	0	10
02	HEAD OF COMPUTER FACILITIES	1	0	0	0	0	1	2
03	CHIEF ACADEMIC OFFICER	3	0	7	0	0	0	10
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	0	0	1	0	0	0	1
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	1	0	0	0	2	1	4
08	CHIEF BUSINESS OFFICER	1	1	23	0	1	0	26
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	1	3	0	0	0	4
11	UNKNOWN	0	0	3	0	0	1	4
	GROUP TOTAL BY USAGE	6	3	46	0	3	3	61

GROUP (PRIVATE, MASTERS , OVER 10000) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 3

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	0	0	0	0	0	0
02	HEAD OF COMPUTER FACILITIES	0	0	0	0	0	0	0
03	CHIEF ACADEMIC OFFICER	0	0	1	0	0	0	1
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	0	0	0	0	0	0	0
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	0	0	1	0	0	0	1
08	CHIEF BUSINESS OFFICER	0	0	1	0	0	0	1
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	0	0	0	0	0
11	UNKNOWN	0	0	0	0	0	0	0
	GROUP TOTAL BY USAGE	0	0	3	0	0	0	3

GROUP (PRIVATE, MASTERS) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 147

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	4	24	1	1	0	30
02	HEAD OF COMPUTER FACILITIES	2	0	1	0	0	1	4
03	CHIEF ACADEMIC OFFICER	5	0	27	0	4	2	38
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	2	0	3	0	1	0	6
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	3	0	1	0	3	1	8
08	CHIEF BUSINESS OFFICER	1	8	39	0	1	0	49
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	2	4	0	0	1	7
11	UNKNOWN	0	0	4	0	0	1	5
	GROUP TOTAL BY USAGE	13	14	103	1	10	6	147

GROUP (PRIVATE, DOCTORATE, BELOW 2500) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 31

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	1	9	0	0	0	10
02	HEAD OF COMPUTER FACILITIES	0	0	0	0	0	0	0
03	CHIEF ACADEMIC OFFICER	1	0	1	0	0	0	2
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	1	0	1	0	0	0	2
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	1	1	0	0	0	0	2
08	CHIEF BUSINESS OFFICER	0	1	8	0	0	1	10
09	OTHER BUSINESS OFFICER	0	1	0	0	0	0	1
10	OTHER	0	0	3	0	0	0	3
11	UNKNOWN	0	0	1	0	0	0	1
	GROUP TOTAL BY USAGE	3	4	23	0	0	1	31

TITLE OF OFFICE TO WHOM HEAD OF INSTALLATION REPORTS BY TYPE OF USAGE

GROUP (PRIVATE, DOCTORATE, 2500-10000) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 57

CODE TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00 NOT APPLICABLE	0	0	0	0	0	0	0
01 HEAD, INSTITUTION OR CAMPUS	1	1	10	0	0	0	12
02 HEAD OF COMPUTER FACILITIES	0	1	0	0	0	0	1
03 CHIEF ACADEMIC OFFICER	2	0	11	0	1	0	14
04 DEAN, ENGINEERING OR TECH	2	0	0	0	1	1	4
05 DEAN, OTHER	2	0	1	0	2	0	5
06 RESEARCH HEAD	0	0	1	0	0	0	1
07 DEPARTMENT HEAD	1	0	0	0	0	0	1
08 CHIEF BUSINESS OFFICER	0	3	7	0	0	1	11
09 OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10 OTHER	0	0	3	2	0	0	5
11 UNKNOWN	0	2	1	0	0	0	3
GROUP TOTAL BY USAGE	8	7	34	2	4	2	57

GROUP (PRIVATE, DOCTORATE, OVER 10000) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 48

CODE TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00 NOT APPLICABLE	0	0	0	0	0	0	0
01 HEAD, INSTITUTION OR CAMPUS	0	0	3	0	0	0	3
02 HEAD OF COMPUTER FACILITIES	0	0	2	0	0	0	2
03 CHIEF ACADEMIC OFFICER	0	0	5	0	0	0	5
04 DEAN, ENGINEERING OR TECH	3	0	0	3	0	0	6
05 DEAN, OTHER	1	0	2	4	0	1	8
06 RESEARCH HEAD	0	0	1	0	0	0	1
07 DEPARTMENT HEAD	1	0	2	0	1	0	4
08 CHIEF BUSINESS OFFICER	0	1	8	0	0	0	9
09 OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10 OTHER	0	0	3	0	0	0	3
11 UNKNOWN	0	1	0	0	0	6	7
GROUP TOTAL BY USAGE	5	2	26	7	1	7	48

GROUP (PRIVATE, DOCTORATE,) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 136

CODE TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00 NOT APPLICABLE	0	0	0	0	0	0	0
01 HEAD, INSTITUTION OR CAMPUS	1	2	22	0	0	0	25
02 HEAD OF COMPUTER FACILITIES	0	1	2	0	0	0	3
03 CHIEF ACADEMIC OFFICER	3	0	17	0	1	0	21
04 DEAN, ENGINEERING OR TECH	5	0	0	3	1	1	10
05 DEAN, OTHER	4	0	4	4	2	1	15
06 RESEARCH HEAD	0	0	2	0	0	0	2
07 DEPARTMENT HEAD	3	1	2	0	1	0	7
08 CHIEF BUSINESS OFFICER	0	5	23	0	0	2	30
09 OTHER BUSINESS OFFICER	0	1	0	0	0	0	1
10 OTHER	0	0	9	2	0	0	11
11 UNKNOWN	0	3	2	0	0	6	11
GROUP TOTAL BY USAGE	16	13	83	9	5	10	136

GROUP (PRIVATE, , BELOW 2500) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 307

CODE TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00 NOT APPLICABLE	0	0	0	0	0	0	0
01 HEAD, INSTITUTION OR CAMPUS	3	7	43	1	1	1	56
02 HEAD OF COMPUTER FACILITIES	1	0	4	0	0	0	5
03 CHIEF ACADEMIC OFFICER	10	0	59	0	23	3	95
04 DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05 DEAN, OTHER	3	1	4	0	1	0	9
06 RESEARCH HEAD	0	0	2	0	0	1	3
07 DEPARTMENT HEAD	7	2	3	0	7	0	19
08 CHIEF BUSINESS OFFICER	1	18	67	0	0	2	88
09 OTHER BUSINESS OFFICER	0	1	0	0	0	0	1
10 OTHER	0	1	7	0	0	1	9
11 UNKNOWN	0	1	13	0	5	3	22
GROUP TOTAL BY USAGE	25	31	202	1	37	11	307

GROUP (PRIVATE, , 2500-10000) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 129

CODE TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00 NOT APPLICABLE	0	0	0	0	0	0	0
01 HEAD, INSTITUTION OR CAMPUS	1	2	23	0	0	0	26
02 HEAD OF COMPUTER FACILITIES	1	1	0	0	0	1	3
03 CHIEF ACADEMIC OFFICER	6	0	20	0	1	0	27
04 DEAN, ENGINEERING OR TECH	2	0	0	0	1	1	4
05 DEAN, OTHER	2	0	2	0	2	0	6
06 RESEARCH HEAD	0	0	1	0	0	0	1
07 DEPARTMENT HEAD	2	0	0	0	2	1	5
08 CHIEF BUSINESS OFFICER	1	5	32	0	1	1	40
09 OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10 OTHER	0	1	7	2	0	0	10
11 UNKNOWN	0	2	4	0	0	1	7
GROUP TOTAL BY USAGE	15	11	89	2	7	5	129

TITLE OF OFFICE TO WHOM HEAD OF INSTALLATION REPORTS BY TYPE OF USAGE

GROUP (PRIVATE,   , OVER 10000)   TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S)   51

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	0	3	0	0	0	3
02	HEAD OF COMPUTER FACILITIES	0	0	2	0	0	0	2
03	CHIEF ACADEMIC OFFICER	0	0	6	0	0	0	6
04	DEAN, ENGINEERING OR TECH	3	0	0	3	0	0	6
05	DEAN, OTHER	1	0	2	4	0	1	8
06	RESEARCH HEAD	0	0	1	0	0	0	1
07	DEPARTMENT HEAD	1	0	3	0	1	0	5
08	CHIEF BUSINESS OFFICER	0	1	9	0	0	0	10
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	3	0	0	0	3
11	UNKNOWN	0	1	0	0	0	6	7
	GROUP TOTAL BY USAGE	5	2	29	7	1	7	51

GROUP (PRIVATE,   )   TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S)   487

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	4	9	69	1	1	1	85
02	HEAD OF COMPUTER FACILITIES	2	1	6	0	0	1	10
03	CHIEF ACADEMIC OFFICER	16	0	85	0	24	3	128
04	DEAN, ENGINEERING OR TECH	5	0	0	3	1	1	10
05	DEAN, OTHER	6	1	8	4	3	1	23
06	RESEARCH HEAD	0	0	4	0	0	1	5
07	DEPARTMENT HEAD	10	2	6	0	10	1	29
08	CHIEF BUSINESS OFFICER	2	24	108	0	1	3	138
09	OTHER BUSINESS OFFICER	0	1	0	0	0	0	1
10	OTHER	0	2	17	2	0	1	22
11	UNKNOWN	0	4	17	0	5	10	36
	GROUP TOTAL BY USAGE	45	44	320	10	45	23	487

GROUP (, ASSOCIATE, BELOW 2500)   TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S)   132

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	1	34	0	0	0	35
02	HEAD OF COMPUTER FACILITIES	0	0	1	0	0	0	1
03	CHIEF ACADEMIC OFFICER	3	0	14	0	4	2	23
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	0	0	16	0	2	0	18
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	0	0	1	0	1	0	2
08	CHIEF BUSINESS OFFICER	0	6	23	0	0	1	30
09	OTHER BUSINESS OFFICER	0	0	1	0	0	0	1
10	OTHER	1	1	3	0	1	1	7
11	UNKNOWN	0	2	12	0	1	0	15
	GROUP TOTAL BY USAGE	4	10	105	0	9	4	132

GROUP (, ASSOCIATE, 2500-10000)   TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S)   133

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	0	40	0	0	1	41
02	HEAD OF COMPUTER FACILITIES	0	0	3	0	3	0	6
03	CHIEF ACADEMIC OFFICER	0	0	13	0	0	0	13
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	1	0	7	0	2	0	10
06	RESEARCH HEAD	0	0	1	0	0	0	1
07	DEPARTMENT HEAD	0	0	2	0	1	1	4
08	CHIEF BUSINESS OFFICER	0	4	42	0	0	1	47
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	5	0	1	0	6
11	UNKNOWN	0	0	2	0	1	2	5
	GROUP TOTAL BY USAGE	1	4	115	0	8	5	133

GROUP (, ASSOCIATE, OVER 10000)   TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S)   47

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	0	9	0	0	0	9
02	HEAD OF COMPUTER FACILITIES	0	0	0	0	0	0	0
03	CHIEF ACADEMIC OFFICER	0	0	3	0	3	0	6
04	DEAN, ENGINEERING OR TECH	0	1	1	0	0	0	2
05	DEAN, OTHER	1	0	1	0	2	0	4
06	RESEARCH HEAD	0	0	1	0	0	0	1
07	DEPARTMENT HEAD	0	0	0	0	1	0	1
08	CHIEF BUSINESS OFFICER	0	0	14	0	0	0	14
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	6	0	0	0	6
11	UNKNOWN	0	0	3	0	1	0	4
	GROUP TOTAL BY USAGE	1	1	38	0	7	0	47

TITLE OF OFFICE TO WHOM HEAD OF INSTALLATION REPORTS BY TYPE OF USAGE

GROUP (, ASSOCIATE,) TOTAL INSTALLATIONS IN GROUP WITH CCMPUTER(S) 312

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	1	83	0	0	1	85
02	HEAD OF COMPUTER FACILITIES	0	0	4	0	3	0	7
03	CHIEF ACADEMIC OFFICER	3	0	30	0	7	2	42
04	DEAN, ENGINEERING GR TECH	0	1	1	0	0	0	2
05	DEAN, OTHER	2	0	24	0	6	0	32
06	RESEARCH HEAD	0	0	2	0	0	0	2
07	DEPARTMENT HEAD	0	0	3	0	3	1	7
08	CHIEF BUSINESS OFFICER	0	10	79	0	0	2	91
09	OTHER BUSINESS OFFICER	0	0	1	0	0	0	1
10	OTHER	1	1	14	0	2	1	19
11	UNKNOWN	0	2	17	0	3	2	24
	GROUP TOTAL BY USAGE	6	15	258	0	24	9	312

GROUP (, BACHELCRS, BELOW 2500) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 202

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NC CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	3	3	18	0	0	1	25
02	HEAD CF COMPUTER FACILITIES	0	0	3	0	0	0	3
03	CHIEF ACADEMIC OFFICER	5	1	44	0	18	2	70
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	0	1	1	0	0	0	2
06	RESEARCH HEAD	0	0	4	0	0	1	5
07	DEPARTMENT HEAD	4	1	3	1	5	1	15
08	CHIEF BUSINESS OFFICER	2	9	48	0	0	1	60
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	4	0	0	0	4
11	UNKNOWN	0	1	10	0	4	3	18
	GROUP TOTAL BY USAGE	14	16	135	1	27	9	202

GROUP (, BACHELORS, 2500-10000) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 31

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	0	7	0	0	0	7
02	HEAD OF COMPUTER FACILITIES	0	0	0	0	0	0	0
03	CHIEF ACADEMIC OFFICER	2	0	5	0	0	0	7
04	DEAN, ENGINEERING OR TECH	0	0	1	0	0	0	1
05	DEAN, CTHER	1	0	0	0	0	0	1
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	0	0	0	0	0	0	0
08	CHIEF BUSINESS OFFICER	0	1	6	0	0	0	7
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	3	0	0	0	3
11	UNKNOWN	0	0	3	0	1	1	5
	GROUP TOTAL BY USAGE	3	1	25	0	1	1	31

GROUP (, BACHELCRS,) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 233

CODE	TITLE	NO ADM	ADM ONLY	MIXEU	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	3	3	25	0	0	1	32
02	HEAD OF COMPUTER FACILITIES	0	0	3	0	0	0	3
03	CHIEF ACADEMIC OFFICER	7	1	49	0	18	2	77
04	DEAN, ENGINEERING OR TECH	0	0	1	0	0	0	1
05	DEAN, OTHER	1	1	1	0	0	0	3
06	RESEARCH HEAD	0	0	4	0	0	1	5
07	DEPARTMENT HEAD	4	1	3	1	5	1	15
08	CHIEF BUSINESS OFFICER	2	10	54	0	0	1	67
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	7	0	0	0	7
11	UNKNOWN	0	1	13	0	5	4	23
	GROUP TOTAL BY USAGE	17	17	160	1	28	10	233

GROUP (, MASTERS , BELOW 2500) TOTAL INSTALLATICNS IN GROUP WITH COMPUTER(S) 103

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NCT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	3	22	1	2	0	28
02	HEAD OF COMPUTER FACILITIES	1	0	1	0	0	0	2
03	CHIEF ACADEMIC OFFICER	2	0	23	0	4	3	32
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	2	0	3	0	1	0	6
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	2	0	0	0	2	0	4
08	CHIEF BUSINESS OFFICER	0	8	18	0	0	0	26
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	1	1	0	0	1	3
11	UNKNOWN	0	0	1	0	0	1	2
	GROUP TOTAL BY USAGE	7	12	69	1	9	5	103

TITLE OF OFFICE TO WHOM HEAD OF INSTALLATION REPORTS BY TYPE OF USAGE

GROUP (, MASTERS , 2500-10000) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 158

CCDE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	1	2	35	0	1	1	40
02	HEAD OF COMPUTER FACILITIES	3	0	5	0	0	1	9
03	CHIEF ACADEMIC OFFICER	6	0	20	0	0	0	26
04	DEAN, ENGINEERING CR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	0	0	3	0	0	0	3
06	RESEARCH HEAC	0	0	0	0	0	0	0
07	DEPARTMENT HEAC	1	0	2	0	3	1	[illegible]
08	CHIEF BUSINESS OFFICER	1	4	45	0	1	1	52
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	2	1	8	0	0	0	11
11	UNKNOWN	0	0	8	0	0	2	10
	GROUP TOTAL BY USAGE	14	7	126	0	5	6	158

GROUP (, MASTERS , OVER 10000) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 40

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	0	5	0	0	0	5
02	HEAD OF COMPUTER FACILITIES	0	0	0	0	0	0	0
03	CHIEF ACADEMIC OFFICER	2	0	3	0	0	0	5
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	1	0	2	0	0	0	3
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	2	0	1	0	0	0	3
08	CHIEF BUSINESS OFFICER	1	1	13	0	0	0	15
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	1	1	6	0	0	0	8
11	UNKNOWN	0	0	1	0	0	0	1
	GROUP TOTAL BY USAGE	7	2	31	0	0	0	40

GROUP (, MASTERS ,) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 301

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	1	5	62	1	3	1	73
02	HEAD OF COMPUTER FACILITIES	4	0	6	0	0	1	11
03	CHIEF ACADEMIC OFFICER	10	0	46	0	4	3	63
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	3	0	8	0	1	0	12
06	RESEARCH HEAC	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	5	0	3	0	5	1	14
08	CHIEF BUSINESS OFFICER	2	13	76	0	1	1	93
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	3	3	15	0	0	1	22
11	UNKNOWN	0	0	10	0	0	3	13
	GROUP TOTAL BY USAGE	28	21	226	1	14	11	301

GROUP (, DOCTORATE, BELOW 2500) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 50

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	0	1	12	0	0	0	13
02	HEAD OF COMPUTER FACILITIES	1	0	2	0	0	0	3
03	CHIEF ACADEMIC OFFICER	1	0	3	0	0	0	4
04	DEAN, ENGINEERING OR TECH	0	0	0	0	0	0	0
05	DEAN, OTHER	1	0	1	0	0	0	2
06	RESEARCH HEAD	0	0	0	0	0	0	0
07	DEPARTMENT HEAD	1	1	0	0	0	0	2
08	CHIEF BUSINESS OFFICER	0	2	13	0	0	1	16
09	OTHER BUSINESS OFFICER	0	2	0	0	0	0	2
10	OTHER	0	1	4	0	0	1	6
11	UNKNOWN	0	1	1	0	0	0	2
	GROUP TOTAL BY USAGE	4	8	36	0	0	2	50

GROUP (, DOCTORATE, 2500-10000) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 101

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	1	1	18	0	0	3	23
02	HEAD OF COMPUTER FACILITIES	0	2	0	0	0	0	2
03	CHIEF ACADEMIC OFFICER	3	0	14	0	1	0	18
04	DEAN, ENGINEERING CR TECH	3	0	1	0	1	1	6
05	DEAN, OTHER	5	0	1	0	2	1	9
06	RESEARCH HEAD	0	0	4	1	0	0	5
07	DEPARTMENT HEAD	1	0	0	0	0	0	1
08	CHIEF BUSINESS OFFICER	1	4	17	0	0	3	25
09	OTHER BUSINESS OFFICER	0	0	0	0	0	0	0
10	OTHER	0	0	6	2	0	0	8
11	UNKNOWN	0	3	1	0	0	0	4
	GROUP TOTAL BY USAGE	14	10	62	3	4	[illegible]	101

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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PRCGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                         UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                 TITLE OF OFFICE TO WHOM HEAD OF INSTALLATION REPORTS BY TYPE OF USAGE

GROUP (      , DOCTCRATE, OVER 10000)           TOTAL INSTALLATICNS IN GROUP WITH COMPUTER(S)       320

     CODE       TITLE                    NO      ADM      MIXED   RESEARCH  INSTR     NO     TOTAL BY
                                         ADM     ONLY               ONLY    ONLY   CLASSFY    TITLE
     00 NCT APPLICABLE                    0        0         0        0       0        0         0
     01 HEAD, INSTITUTION OR CAMPUS       1        2        23        1       0        4        31
     02 HEAD OF COMPUTER FACILITIES       2        4        11        3       1        1        22
     03 CHIEF ACADEMIC OFFICER            4        2        21        0       0        1        28
     04 DEAN, ENGINEERING OR TECH        10        0         6        5       1        0        22
     05 DEAN, OTHER                      12        0        15       10       0        3        40
     06 RESEARCH HEAD                     6        0         8        1       0        3        18
     07 DEPARTMENT HEAC                  16        1        12       18       1        4        52
     08 CHIEF BUSINESS OFFICER            3       15        27        1       0        3        49
     09 OTHER BUSINESS OFFICER            0        1         0        0       0        0         1
     10 OTHER                             4        4        18        5       1        1        33
     11 UNKNOWN                           0        2         4        9       1        8        24
          GROUP TOTAL BY USAGE           58       31       145       53       5       28       320

GROUP (      , DOCTORATE,         )             TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S)       471

     CODE       TITLE                    NO      ADM      MIXED   RESEARCH  INSTR     NO     TOTAL BY
                                         ADM     ONLY               ONLY    ONLY   CLASSFY    TITLE
     00 NOT APPLICABLE                    0        0         0        0       0        0         0
     01 HEAD, INSTITUTION CR CAMPUS       2        4        53        1       0        7        67
     02 HEAD CF COMPUTER FACILITIES       3        6        13        3       1        1        27
     03 CHIEF ACADEMIC OFFICER            8        2        38        0       1        1        50
     04 DEAN, ENGINEERING CR TECH        13        0         7        5       2        1        28
     05 DEAN, OTHER                      18        0        17       10       2        4        51
     06 RESEARCH HEAC                     6        0        12        2       0        3        23
     07 DEPARTMENT HEAD                  18        2        12       18       1        4        55
     08 CHIEF BUSINESS OFFICER            4       21        57        1       0        7        90
     09 OTHER BUSINESS OFFICER            0        3         0        0       0        0         3
     10 OTHER                             4        5        28        7       1        2        47
     11 UNKNOWN                           0        6         6        9       1        8        30
          GROUP TOTAL BY LSAGE           76       49       243       56       9       38       471

GROUP (     ,          , BELOW 2500)            TOTAL INSTALLATICNS IN GROUP WITH COMPUTER(S)       487

     CODE       TITLE                    NO      ADM      MIXED   RESEARCH  INSTR     NO     TOTAL BY
                                         ADM     ONLY               ONLY    ONLY   CLASSFY    TITLE
     00 NOT APPLICABLE                    0        0         0        0       0        0         0
     01 HEAD, INSTITUTION OR CAMPUS       3        8        86        1       2        1       101
     02 HEAD CF COMPUTER FACILITIES       2        0         7        0       0        0         9
     03 CHIEF ACADEMIC OFFICER           11        1        84        0      26        7       129
     04 DEAN, ENGINEERING OR TECH         0        0         0        0       0        0         0
     05 DEAN, OTHER                       3        1        21        0       3        0        28
     06 RESEARCH HEAD                     0        0         4        0       0        1         5
     07 DEPARTMENT HEAC                   7        2         4        1       8        1        23
     08 CHIEF BUSINESS OFFICER            2       25       102        0       0        3       132
     09 OTHER BUSINESS OFFICER            0        2         1        0       0        0         3
     10 OTHER                             1        3        12        0       1        3        20
     11 UNKNOWN                           0        4        24        0       5        4        37
          GROUP TOTAL BY USAGE           29       46       345        2      45       20       487

GROUP (     ,          , 2500-10000)            TOTAL INSTALLATICNS IN GROUP WITH COMPUTER(S)       423

     CODE       TITLE                    NO      ADM      MIXED   RESEARCH  INSTR     NO     TOTAL BY
                                         ADM     ONLY               ONLY    ONLY   CLASSFY    TITLE
     00 NOT APPLICABLE                    0        0         0        0       0        0         0
     01 HEAD, INSTITUTION OR CAMPUS       2        3       100        0       1        5       111
     02 HEAD OF COMPUTER FACILITIES       3        2         8        0       3        1        17
     03 CHIEF ACADEMIC OFFICER           11        0        52        0       1        0        64
     04 DEAN, ENGINEERING CR TECH         3        0         2        0       1        1         7
     05 DEAN, OTHER                       7        0        11        0       4        1        23
     06 RESEARCH HEAC                     0        0         5        1       0        0         6
     07 DEPARTMENT HEAD                   2        0         4        0       4        2        12
     08 CHIEF BUSINESS OFFICER            2       13       110        0       1        5       131
     09 OTHER BUSINESS OFFICER            0        0         0        0       0        0         0
     10 OTHER                             2        1        22        2       1        0        28
     11 UNKNOWN                           0        3        14        0       2        5        24
          GROUP TOTAL BY USAGE           32       22       328        3      18       20       423

GROUP (     ,          , OVER 10000)            TOTAL INSTALLATICNS IN GROUP WITH COMPUTER(S)       407

     CODE       TITLE                    NO      ADM      MIXED   RESEARCH  INSTR     NO     TOTAL BY
                                         ADM     ONLY               ONLY    ONLY   CLASSFY    TITLE
     00 NCT APPLICABLE                    0        0         0        0       0        0         0
     01 HEAD, INSTITUTION OR CAMPUS       1        2        37        1       0        4        45
     02 HEAD CF COMPUTER FACILITIES       2        4        11        3       1        1        22
     03 CHIEF ACADEMIC OFFICER            6        2        27        0       3        1        39
     04 DEAN, ENGINEERING OR TECH        10        1         7        5       1        0        24
     05 DEAN, CTHER                      14        0        18       10       2        3        47
     06 RESEARCH HEAD                     6        0         9        1       0        3        19
     07 DEPARTMENT HEAC                  18        1        13       18       2        4        56
     08 CHIEF BUSINESS OFFICER            4       16        54        1       0        3        78
     09 OTHER BUSINESS OFFICER            0        1         0        0       0        0         1
     10 OTHER                             5        5        30        5       1        1        47
     11 UNKNOWN                           0        2         8        9       2        8        29
          GROUP TOTAL BY USAGE           66       34       214       53      12       28       407
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TITLE OF OFFICE TO WHOM HEAD OF INSTALLATION REPORTS BY TYPE OF USAGE

GROUP (, ,) TOTAL INSTALLATIONS IN GROUP WITH COMPUTER(S) 1317

CODE	TITLE	NO ADM	ADM ONLY	MIXED	RESEARCH ONLY	INSTR ONLY	NO CLASSFY	TOTAL BY TITLE
00	NOT APPLICABLE	0	0	0	0	0	0	0
01	HEAD, INSTITUTION OR CAMPUS	6	13	223	2	3	10	257
02	HEAD OF COMPUTER FACILITIES	7	6	26	3	4	2	48
03	CHIEF ACADEMIC OFFICER	28	3	163	0	30	8	232
04	DEAN, ENGINEERING OR TECH	13	1	9	5	2	1	31
05	DEAN, OTHER	24	1	50	10	9	4	98
06	RESEARCH HEAD	6	0	18	2	0	4	30
07	DEPARTMENT HEAD	27	3	21	19	14	7	91
08	CHIEF BUSINESS OFFICER	8	54	266	1	1	11	341
09	OTHER BUSINESS OFFICER	0	3	1	0	0	0	4
10	OTHER	8	9	64	7	3	4	95
11	UNKNOWN	0	9	46	9	9	17	90
	GROUP TOTAL BY USAGE	127	102	887	58	75	68	1317

V. COMPUTER SCIENCES AND RELATED DEGREE PROGRAMS

1. Introduction

FORM 3 of the data collection instrument (see Appendix) was devoted to "Computer Science courses and/or Degree Programs". A complete set of summaries were produced for the degree programs (line 03 of FORM 3) and are presented in Section IX. Summaries for courses by general descriptors which were provided to the respondents appear in Section X.

2. Types of Degree Programs Reported

Table V-1 presents the number of degree programs reported at each of the four levels, associate, bachelor's, master's and doctorate, for each degree program name and totals.

3. Summary of Programs by Level

Table V-2 provides a comparison with the population estimates of going programs during 1964-65, 1966-67, 1969-70 and 1976-77.

Table V-2

Estimates of Numbers of Degree Programs in

Computer Science, Data Processing, Information Sciences, etc.

Source	Year	Assoc.	Bach.	Mast.	Doct.
SREB SURVEY	1964-65	83	44	61	38
SREB INVENTORY	1966-67	192	83	87	52
SREB INVENTORY	1969-70	405	198	155	98
FICHE	1976-77	570	541	224	119

4. Numbers of Majors and Degrees Awarded

Table V-3 shows the estimated total numbers of majors in computer science, data processing, etc. for the years 1964-65, 1966-67, 1969-70, and 1976-77.

Table V-4 gives the estimated total numbers of degrees awarded by level for the years 1966-67, 1969-70 and 1976-77.

Table V-3

Estimated Numbers of Majors in Computer Sciences

Data Processing, Information Sciences, Etc.

Source	Year	Majors	
		Undergraduate	Graduate
SREB Survey	1964-65	4,338	1,314
SREB Inventory	1966-67	22,161	4,936
SREB Inventory	1969-70	65,916	9,123
FICHE	1976-77	105,190	14,343

Table V-1

Reported Degree Programs in Computer Science, Data Processing, Information Science, etc. for Academic Years 1966-67, 1969-70, 1976-77, 1977-78 and 1978-79

Program Name	Associate 66-67	Associate 69-70	Associate 76-77	Associate 77-78	Associate 78-79	Bachelor's 66-67	Bachelor's 69-70	Bachelor's 76-77	Bachelor's 77-78	Bachelor's 78-79
Data Processing: Total	122	204	179	183	184	15	21	27	27	27
In Departments of:										
Data Processing	122	136	110	112	112	11	5	8	8	8
Business Administration	0	34	34	35	35	1	11	15	15	15
Business		17	14	14	14		2	3	3	3
Miscellaneous	0	17	21	22	23	3	3	1	1	1
Computer Science: Total	8	33	64	64	65	50	90	181	197	199
In Departments of:										
Computer Science	7	20	32	32	33	30	40	100	106	108
Mathematics	0	0	10	10	10	7	19	27	31	31
Electrical Engineering	0	0	0	0	0	8	8	2	2	2
Computer and Information Science		1	1	1	1		1	10	13	13
Mathematical Sciences			2	2	2			20	20	20
Miscellaneous	1	12	19	19	19	5	24	22	25	25
Computer Programming: Total	4	38	36	37	37	0	6	4	4	4
In Departments of:										
Data Processing		22	11	11	11	0	1	0	0	0
Computer Programming	4	5	8	8	8	0	0	1	1	1
Miscellaneous		11	17	18	18	0	5	3	3	3
Computer Technology: Total	8	21	12	12	12	1	9	1	1	1
Information Systems: Total	0	5	6	6	5	3	7	24	24	24
In Departments of:										
Information Systems			5	5	4			10	10	10
Miscellaneous		5	1	1	1		7	14	14	14
Information Science: Total	0	0	1	1	1	2	3	8	10	10
Computer Engineering: Total			1	1	1			7	8	9
In Departments of:										
Electrical Engineering			0	0	0			5	6	7
Miscellaneous			1	1	1			2	2	2
Computer Science and Engineering: Total			1	1	1			9	9	9
In Departments of:										
Electrical Engineering			0	0	0			6	6	6
Miscellaneous			1	1	1			3	3	3
Miscellaneous: Total		1	31	31	30	1	12	53	55	59
TOTAL (Reported)	142	302	331	336	336	72	148	314	335	342
Estimated Population Totals[1]	178	405	570	579	579	90	198	541	577	589

[1] Reported Totals x (Number Institutions in Population)/(Number Institutions Responding)

Table V-1

Reported Degree Programs in Computer Science, Data Processing, Information Science, etc. for Academic Years 1966-67, 1969-70, 1976-77, 1977-78 and 1978-79

(continued)

Program Name	Master's					Doctorate				
	66-67	69-70	76-77	77-78	78-79	66-67	69-70	76-77	77-78	78-79
Data Processing: Total	5	6	2	2	2	1	1	1	1	1
In Departments of:										
Data Processing	4	1	0	0	0	1	0	0	0	0
Business Administration	1	2	1	1	1	0	0	1	1	1
Business		2	1	1	1		0	0	0	0
Miscellaneous	0	1	0	0	0	0	1	0	0	0
Computer Science: Total	58	76	81	88	93	35	50	40	41	43
In Departments of:										
Computer Science	35	37	51	55	58	22	24	28	29	30
Mathematics	4	8	8	10	10	4	3	2	2	2
Electrical Engineering	9	12	2	2	2	6	9	1	1	1
Computer and Information Science		3	5	5	6		2	2	2	3
Mathematical Sciences			5	6	6			2	2	2
Miscellaneous	10	16	10	10	11	3	12	5	5	5
Computer Programming: Total	0	0	0	0	1	0	1	0	0	0
In Departments of:										
Data Processing			0	0	0		0	0	0	0
Computer Programming	0	0	0	0	0		0	0	0	0
Miscellaneous		0	0	0	1		1	0	0	0
Computer Technology: Total	0	3	0	0	0	0	2	0	0	0
Information Systems: Total	2	5	8	8	10	1	3	5	5	5
In Departments of:										
Information Systems			2	2	4			1	1	1
Miscellaneous	2	5	6	6	6		3	4	4	4
Information Science: Total	9	7	3	3	3	8	6	2	2	2
Computer Engineering: Total			6	7	7			3	3	4
In Departments of:										
Electrical Engineering			4	5	5			2	2	3
Miscellaneous			2	2	2			1	1	1
Computer Science and Engineering: Total			9	9	9			6	6	6
In Departments of:										
Electrical Engineering			4	4	4			3	3	3
Miscellaneous			5	5	5			3	3	3
Miscellanoues: Total	2	17	21	21	24	1	10	12	12	12
TOTAL (Reported)	78	116	130	138	149	46	73	69	70	73
Estimated Population Totals[1]	98	155	224	238	257	58	98	119	121	126

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[1] Reported Totals x (Number Institutions in Population)/(Number Institutions Responding)

Table V-4

Estimated Numbers of Degrees Awarded for
1966-67, 1969-70 and 1976-77

Source	Year	Degrees			
		Assoc.	Bach.	Mast.	Doct.
SREB Inventory	1966-67	1281	594	742	174
SREB Inventory	1969-70	6051	2208	1442	307
FICHE	1976-77	8271	9509	3161	345

5. Institutions Offering Degree Programs

Institutions which reported having a degree program going at least by 1978-79 in computer sciences, data processing, etc. are listed on pages V-07 through V-21. The institutions are listed by highest level of offering (associate), etc. through (doctorate).

6. Computer Services Supplied for Courses

Table V-5 shows the number of courses, number of students enrolled in these courses and the dollar value of computer services which were supplied to these courses. The amounts are reported figures, not population estimates, and are obtained from the reports of 1191 installations in 1094 institutions. Since all classes of institutions are represented in these data, caution should be exerted in their interpretation. For a given group of institutions similar charts can be constructed from the data given in Section VIII. More probing analyses can be accomplished from the summaries presented in Section VIII.

The quantities in Table V-5 are of primary interest in their relation to each other rather than absolutes. There is no reason to believe that one category or item is any more or less accurate than any other.

Table V-5

Cost Per Student Per Course for Various
Discipline Areas, 1969-70 and 1976-77

Discipline Area	Number of Courses 1976-77	Number of Students 1976-77	Value of Computer Use (in millions) 1976-77	Cost per Student per Course 1969-70	Cost per Student per Course 1976-77
Computer Science	8651	292,921	$17.2	$78	$59
Engineering	7356	187,877	13.3	45	71
Business	5320	259,003	14.8	44	57
Math/statistics	3716	125,145	4.8	42	38
Physical Sciences	2418	84,053	3.1	45	37
Social Sciences	3090	85,621	2.3	36	26
Education	1088	31,292	.7	27	24
Environmental and Life Science	2408	69,825	1.8	--	26
All Other	3962	133,175	5.1	54	38

7. Programming Languages

Table V-6 gives the estimated number of installations using a given programming language. The total number of installations was estimated to have been 2752.

Table V-6

Programming Languages

Estimated Number of Installations Using Each Language

		% of total
FORTRAN	1967	71
COBOL	1630	59
BASIC	1508	55
RPG	1133	41
PL/1	701	25
Graphics	575	21
APL	544	20
PASCAL	253	9
COURSEWRITER	158	6
TUTOR	71	3
PLANIT	26	1
LOGO	22	1
OTHER	990	36

The degree program names and department names were coded as follows by the institutions' respondents.

Degree Program Name	Code
Computer Engineering	CEN
Computer Programming	CPR
Computer Science	CSC
Computer Science and Engineering	CSE
Computer Science Technology	CST
Computer Technology	CTE
Data Processing	DPR
Electronic Data Processing	EDP
Information and Computer Sciences	ICS
Information Processing	IPR
Information Science	ISC
Information Systems	ISY
Systems Analysis	SAN
Systems Engineering	SEN
Systems and Information Sciences	SIS
System Sciences	SYS
Unknown or not elsewhere classified	OTH

Department Name	Code
Business Administration	BAD
Computer and Communications Sciences	CCS
Computer and Information Science	CIS
Computer Programming	CPR
Computer Science	CSC
Computer Technology	CTE
Data Processing	DPR
Electrical Engineering	EEN
Electrical Engineering Technology	EET
Industrial Engineering	IEN
Information and Computer Science	ICS
Information Processing	IPR
Information Science	ISC
Information Systems	ISY
Mathematics	MAT
Systems Analysis	SAN
Statistics and Computer Science	SCS
Systems Engineering	SEN
Systems and Information Sciences	SIS
Systems Science	SYS
More than one of the above:	
Committee	COM
Other Departments in	
Engineering	ENG
Environmental Sciences	ENV
Life Sciences	LSC
Mathematical Sciences	MSC
Physical Sciences	PSC
Social Sciences	SSC
Education	EDU
Business, Commerce	BUS
Other Departments not elsewhere classified	NEC

DEGREE PROGRAMS

GROUP I (ASSOCIATE) (AS OF JUNE 30, 1977)

YEAR OFFERED AND DEGREE 1976-77	1977-78	1978-79	NAME OF INSTITUTION	CITY	STATE	ZIPCODE	MAJORS ENROLLED 1976-77 UNDERGRAD	GRADUATE
BAD PROGRAM IN DEPT OF BAD								
A	A	A	GAINESVILLE JR COLLEGE	GAINESVILLE	GA	30501	0	0
CPR PROGRAM IN DEPT OF BAD								
A	A	A	SHASTA COLLEGE	REDDING	CA	96001	0	0
A	A	A	DURHAM COLLEGE	DURHAM	NC	27707	70	0
	A	A	METROPOLITAN TECHNICAL CC	OMAHA	NE	68137	25	0
A	A	A	GENESEE COMMUNITY COLLEGE	BATAVIA	NY	14020	40	0
A	A	A	CINCINNATI TECH COLLEGE	CINCINNATI	OH	45223	80	0
CPR PROGRAM IN DEPT OF BUS								
A	A	A	BREVARD CMTY COLLEGE	CUCOA	FL	32922	206	0
A	A	A	KANKAKEE CMTY COLLEGE	KANKAKEE	IL	60901	15	0
A	A	A	BERGEN COMMUNITY COLLEGE	PARAMUS	NJ	07652	313	0
A	A	A	MICHAEL J OWENS TECH C	TOLEDO	OH	43699	135	0
A	A	A	TERRA TECHNICAL COLLEGE	FREMONT	OH	43420	65	0
CPR PROGRAM IN DEPT OF CIS								
A	A	A	SIERRA COLLEGE	ROCKLIN	CA	95677	50	0
CPR PROGRAM IN DEPT OF CPR								
A	A	A	IND VOC TECH C-SOUTH BEND	SOUTH BEND	IN	46619	80	0
A	A	A	IND VOC TECH C-KOKOMO	KOKOMO	IN	46901	29	0
A	A	A	BRISTOL COMMUNITY COLLEGE	FALL RIVER	MA	02720	12	0
A	A	A	DAVENPORT COLLEGE OF BUS	GRAND RAPIDS	MI	49502	153	0
A	A	A	NORTHLAND CMTY COLLEGE	THF RIVR FLS	MN	56701	5	0
A	A	A	STARK TECHNICAL COLLEGE	CANTON	OH	44720	148	0
A	A	A	TRIDENT TECH C-NORTH CAM	CHARLESTON	SC	29411	60	0
CPR PROGRAM IN DEPT OF CSC								
A	A	A	POTOMAC STATE COLLEGE	KEYSER	WV	26726	55	0
CPR PROGRAM IN DEPT OF DPR								
A	A	A	MANATEE JUNIOR COLLEGE	BRADENTON	FL	33507	100	0
A	A	A	TALLAHASSEE CMTY COLLEGE	TALLAHASSEE	FL	32304	13	0
A	A	A	KIRKWOOD CMTY COLLEGE	CEDAR RAPIDS	IA	52406	150	0
A	A	A	WESTERN IOWA TECH COMM CO	SIOUX CITY	IA	51102	50	0
A	A	A	LAKE COUNTY, COLLEGE OF	GRAYSLAKE	IL	60030	350	0
A	A	A	CARL SANDBURG COLLEGE	GALESBURG	IL	61401	14	0
A	A	A	GUILFORD TECHNICAL INST	JAMESTOWN	NC	27282	110	0
A	A	A	ND STATE SCHOOL SCIENCE	WAHPETON	ND	58075	65	0
A	A	A	TEX ST TECH RIO GRANDE	HARLINGEN	TX	78550	30	0
A	A	A	SAN ANTONIO COLLEGE	SAN ANTONIO	TX	78284	999	0
A	A	A	NORTHEAST WIS TECH INST	GREEN BAY	WI	54303	119	0
CPR PROGRAM IN DEPT OF ISY								
A	A	A	PRAIRIE STATE COLLEGE	CHICAGO HTS	IL	60411	125	0
CPR PROGRAM IN DEPT OF MAT								
A	A	A	VALLEY FORGE MILITARY JC	WAYNE	PA	19087	0	0
CSC PROGRAM IN DEPT OF BAD								
A	A	A	PALOMAR COLLEGE	SAN MARCOS	CA	92069	30	0
A	A	A	ABRAHAM BALDWIN AGRL C	TIFTON	GA	31794	30	0
A	A	A	HOCKING TECHNICAL COLLEGE	NELSONVILLE	OH	45764	55	0
CSC PROGRAM IN DEPT OF BUS								
A	A	A	MAINLAND, COLLEGE OF THE	TEXAS CITY	TX	77590	47	0
CSC PROGRAM IN DEPT OF CIS								
A	A	A	MERCED COLLEGE	MERCED	CA	95348	0	0
CSC PROGRAM IN DEPT OF COM								
A	A	A	ATLANTA JUNIOR COLLEGE	ATLANTA	GA	30310	27	0
A	A	A	WILLIAMSPORT AREA CC	WILLIAMSPORT	PA	17701	300	0
CSC PROGRAM IN DEPT OF CSC								
A	A	A	PIMA COMMUNITY COLLEGE	TUCSON	AZ	85709	200	0
A	A	A	DIABLO VALLEY COLLEGE	PLEASANT HILL	CA	94523	50	0
A	A	A	SANTA BARBARA CTY COLLEGE	SANTA BARBARA	CA	93109	200	0
A	A	A	SANTA ANA COLLEGE	SANTA ANA	CA	92706	95	0
A	A	A	OCEAN COUNTY COLLEGE	TOMS RIVER	NJ	08753	125	0
A	A	A	UNION CO TECHNICAL INST	SCOTCH PLAINS	NJ	07076	75	0
A	A	A	JAMESTOWN CMTY COLLEGE	JAMESTOWN	NY	14701	0	0
A	A	A	BEAVER CAMPUS - PSU	MONACA	PA	15061	53	0
A	A	A	NEW KENSINGTON CAMPUS - P	NEW KENSINGTN	PA	15068	31	0
A	A	A	SCHUYLKILL CAMPUS PSU	SHYLKL HAVEN	PA	17972	28	0
A	A	A	WORTHINGTON-SCRANTON CAMP	DUNMORE	PA	18512	31	0
A	A	A	TEMPLE JUNIOR COLLEGE	TEMPLE	TX	76501	180	0
A	A	A	SAN JACINTO COLLEGE	PASADENA	TX	77505	270	0
		A	NATIONAL BUSINESS COLLEGE	ROANOKE	VA	24009	15	0
A	A	A	COLUMBIA BASIN CC	PASCO	WA	99301	40	0
A	A	A	NORTHWEST CMTY COLLEGE	POWELL	WY	82435	5	0
CSC PROGRAM IN DEPT OF CTE								
A	A	A	KANSAS TECHNICAL INST	SALINA	KS	67401	30	0

DEGREE PROGRAMS
GROUP I (ASSOCIATE) CONTINUED
(AS OF JUNE 30, 1977)

YEAR OFFERED AND DEGREE							MAJORS ENROLLED 1976-77	
1976-77	1977-78	1978-79	NAME OF INSTITUTION	CITY	STATE	ZIPCODE	UNDERGRAD	GRADUATE
CSC PROGRAM IN DEPT OF DPR								
A	A	A	CHATTAHOOCHEE VALLEY CC	PHENIX CITY	AL	36867	7	0
A	A	A	LURLEEN B WALLACE ST JC	ANDALUSIA	AL	36420	10	0
A	A	A	GULF COAST CMTY COLLEGE	PANAMA CITY	FL	32401	84	0
A	A	A	HUDSON VLY CMTY COLLEGE	TROY	NY	12180	100	0
CSC PROGRAM IN DEPT OF MAT								
A	A	A	MARIN, COLLEGE OF	KENTFIELD	CA	94904	0	0
A	A	A	MONTGOMERY C TAKOMA PARK	TAKOMA PARK	MD	20012	31	0
A	A	A	MOUNT HOOD CMTY COLLEGE	GRESHAM	OR	97030	7	0
CSC PROGRAM IN DEPT OF MSC								
A	A	A	BRUNSWICK JUNIOR COLLEGE	BRUNSWICK	GA	31520	4	0
CSC PROGRAM IN DEPT OF NEC								
A	A	A	RHODE ISLAND JR COLLEGE	WARWICK	RI	02886	45	0
CSE PROGRAM IN DEPT OF CSE								
A	A	A	PITTSBG BRADFORD CAM, U O	BRADFORD	PA	16701	15	0
CST PROGRAM IN DEPT OF CCS								
A	A	A	NTHESTN OKLA AGRL-MECH C	MIAMI	OK	74354	67	0
CST PROGRAM IN DEPT OF CSC								
A	A	A	WENTWORTH INSTITUTE	BOSTON	MA	02115	30	0
A	A	A	MOTLOW STATE CMTY COLLEGE	TULLAHOMA	TN	37388	33	0
A	A	A	ALVIN COMMUNITY COLLEGE	ALVIN	TX	77511	10	0
CST PROGRAM IN DEPT OF EET								
A	A	A	MILWAUKEE AREA TECH C	MILWAUKEE	WI	53203	85	0
CTE PROGRAM IN DEPT OF CSC								
A	A	A	MOUNT SAN ANTONIO COLLEGE	WALNUT	CA	91789	40	0
A	A	A	BUCKS COUNTY COMMUNITY CO	NEWTOWN	PA	18940	88	0
CTE PROGRAM IN DEPT OF CTE								
A	A	A	FLORIDA KEYS COMMUNITY CO	KEY WEST	FL	33040	26	0
A	A	A	IND VOC TECH C CEN OFF	INDIANAPOLIS	IN	46206	602	0
A	A	A	HOLYOKE COMMUNITY COLLEGE	HOLYOKE	MA	01040	78	0
A	A	A	ITAWAMBA JUNIOR COLLEGE	FULTON	MS	38843	30	0
A	A	A	KENT STATE U., TRUMBULL C	WARREN	OH	44483	79	0
DPR PROGRAM IN DEPT OF BAD								
A	A	A	MESA COMMUNITY COLLEGE	MESA	AZ	85202	168	0
A	A	A	GLENDALE CMTY COLLEGE	GLENDALE	AZ	85302	180	0
A	A	A	PHOENIX COLLEGE	PHOENIX	AZ	85013	187	0
A	A	A	MARICOPA TECH CC	PHOENIX	AZ	85004	230	0
A	A	A	SCOTTSDALE CMTY COLLEGE	SCOTTSDALE	AZ	85252	15	0
A	A	A	LONG BEACH CITY COLLEGE	LONG BEACH	CA	90808	174	0
A	A	A	GREATER HARTFORD CC	HARTFORD	CT	06105	120	0
A	A	A	OKALOOSA-WALTON JUNIOR C	NICEVILLE	FL	32578	164	0
A	A	A	MIDDLE GEORGIA COLLEGE	COCHRAN	GA	31014	19	0
	A	A	IOWA CENTRAL CC	FORT DODGE	IA	50501	0	0
A	A	A	ROCK VALLEY COLLEGE	ROCKFORD	IL	61101	175	0
A	A	A	HIGHLAND CMTY COLLEGE	FREEPORT	IL	61032	113	0
A	A	A	CAPE COD CMTY COLLEGE	W BARNSTABLE	MA	02668	29	0
A	A	A	NORTH SHORE CMTY COLLEGE	BEVERLY	MA	01915	50	0
A	A	A	NEWBURY JUNIOR COLLEGE	BOSTON	MA	02115	24	0
A	A	A	WAYNE COUNTY CMTY COLLEGE	DETROIT	MI	48201	253	0
A	A	A	MUSKEGON BUSINESS COLLEGE	MUSKEGON	MI	49442	70	0
A	A	A	LONGVIEW COMMUNITY COLLEG	LEE'S SUMMIT	MO	64063	147	0
A	A	A	BURLINGTON COUNTY COLLEGE	PEMBERTON	NJ	08068	134	0
A	A	A	CORNING COMMUNITY COLLEGE	CORNING	NY	14830	55	0
A	A	A	CAYUGA CO CMTY COLLEGE	AUBURN	NY	13021	32	0
A	A	A	SHAWNEE ST GEN AND TECH C	PORTSMOUTH	OH	45662	22	0
A	A	A	CLATSOP COMMUNITY COLLEGE	ASTORIA	OR	97103	10	0
A	A	A	BEAVER CO. CMTY COLLEGE O	MONACA	PA	15061	43	0
A	A	A	FLORENCE DARLINGTON TECH	FLORENCE	SC	29502	36	0
A	A	A	STATE TECH INST MEMPHIS	MEMPHIS	TN	38134	289	0
A	A	A	EL CENTRO COLLEGE	DALLAS	TX	75202	247	0
A	A	A	GRAYSON CO JUNIOR COLLEGE	DENISON	TX	75020	50	0
A	A	A	MILWAUKEE AREA TECH C	MILWAUKEE	WI	53203	650	0
DPR PROGRAM IN DEPT OF BUS								
A	A	A	DENVER CENTRAL OFF, CC OF	DENVER	CO	80203	300	0
A	A	A	MCHENRY COUNTY COLLEGE	CRYSTAL LAKE	IL	60014	10	0
A	A	A	THORNTON CMTY COLLEGE	SOUTH HOLLAND	IL	60473	84	0
A	A	A	HOWARD COMMUNITY COLLEGE	COLUMBIA	MD	21044	92	0
A	A	A	MONROE CO CMTY COLLEGE	MONROE	MI	48161	50	0
A	A	A	MINN TECH INST CROOKSTN.	CROOKSTON	MN	56716	16	0
A	A	A	DUTCHESS CMTY COLLEGE	POUGHKEEPSIE	NY	12601	65	0
A	A	A	CLARK TECHNICAL COLLEGE	SPRINGFIELD	OH	45505	79	0

DEGREE PROGRAMS
GROUP I (ASSOCIATE)) CONTINUED
(AS OF JUNE 30, 1977)

YEAR OFFERED AND DEGREE							MAJORS ENROLLED 1976-77	
1976-77	[illegible]977-78	1978-79	NAME OF INSTITUTION	CITY	STATE	ZIPCODE	UNDERGRAD	GRADUATE
A	A	A	MUSKINGUM AREA TECH C	ZANESVILLE	OH	43701	42	0
A	A	A	MARION TECHNICAL COLLEGE	MARION	OH	43302	40	0
A	A	A	STHWSTN OREG CMTY COLLEGE	COOS BAY	OR	97420	22	0
DPR PROGRAM IN DEPT OF CIS								
A	A	A	SCHOOLCRAFT COLLEGE	LIVONIA	MI	48151	130	0
		A	VOLUNTEER ST CMTY COLLEGE	GALLATIN	TN	37066	20	0
DPR PROGRAM IN DEPT OF COM								
A	A	A	BARTON CO CMTY JR COLLEGE	GREAT BEND	KS	67530	57	0
DPR PROGRAM IN DEPT OF CPR								
A	A	A	NORTH CENTRAL TECH INST	WAUSAU	WI	54401	70	0
DPR PROGRAM IN DEPT OF CSC								
A	A	A	JEFFERSON ST JR COLLEGE	BIRMINGHAM	AL	35215	200	0
A	A	A	MOUNT SAN ANTONIO COLLEGE	WALNUT	CA	91789	200	0
A	A	A	SAN JOAQUIN DELTA COLLEGE	STOCKTON	CA	95207	200	0
A	A	A	MASSASOIT CMTY COLLEGE	BROCKTON	MA	02402	[illegible]	0
A	A	A	OAKLAND COMMUNITY COLLEGE	BLOOMFLD HLS	MI	48013	400	0
A	A	A	BUCKS COUNTY COMMUNITY CO	NEWTOWN	PA	18940	106	0
DPR PROGRAM IN DEPT OF CTE								
A	A	A	ULSTER CO CMTY COLLEGE	STONE RIDGE	NY	12484	45	0
DPR PROGRAM IN DEPT OF DPR								
A	A	A	NTHEST ALA ST JR COLLEGE	RAINSVILLE	AL	35986	15	0
A	A	A	YAVAPAI COLLEGE	PRESCOTT	AZ	86301	12	0
A	A	A	SANTA ANA COLLEGE	SANTA ANA	CA	92706	75	0
A	A	A	MONTEREY PEN COLLEGE	MONTEREY	CA	93940	40	0
A	A	A	CHAFFEY COLLEGE	ALTA LOMA	CA	91701	300	0
A	A	A	CHABOT COLLEGE	HAYWARD	CA	94545	125	0
A	A	A	CONTRA COSTA COLLEGE	SAN PABLO	CA	94806	150	0
A	A	A	WEST VALLEY COLLEGE	SARATOGA	CA	95070	45	0
A	A	A	SISKIYOUS, COLLEGE OF THE	WEED	CA	96094	0	0
A	A	A	AMERICAN RIVER COLLEGE	SACRAMENTO	CA	95841	200	0
A	A	A	OTERO JUNIOR COLLEGE	LA JUNTA	CO	81050	25	0
A	A	A	TRINIDAD STATE JR COLLEGE	TRINIDAD	CO	81082	14	0
A	A	A	EL PASO COMMUNITY COLLEGE	COLORADO SPG	CO	80904	238	0
A	A	A	MANCHESTER CMTY COLLEGE	MANCHESTER	CT	06040	140	0
A	A	A	THAMES VLY STATE TECH C	NORWICH	CT	06360	200	0
A	A	A	DELA. TECH. & COM. COLLEG	GEORGETOWN	DE	19947	52	2
A	A	A	MIAMI-DADE CMTY COLLEGE	MIAMI	FL	33176	400	0
A	A	A	CHIPOLA JUNIOR COLLEGE	MARIANNA	FL	32446	17	0
A	A	A	SNT JOHNS RIVER JUNIOR C	PALATKA	FL	32077	15	0
A	A	A	EDISON COMMUNITY COLLEGE	FORT MYERS	FL	33901	25	0
A	A	A	BROWARD CMTY COLLEGE	FT LAUDERDALE	FL	33301	135	0
A	A	A	DAYTONA BCH CMTY COLLEGE	DAYTONA BEACH	FL	32015	103	0
A	A	A	POLK COMMUNITY COLLEGE	WINTER HAVEN	FL	33880	45	0
A	A	A	BRUNSWICK JUNIOR COLLEGE	BRUNSWICK	GA	31520	81	0
A	A	A	HAWAII KAPIOLANI CC,U OF	HONOLULU	HI	96814	190	0
A	A	A	IOWA WSTN CC COUNCIL BLF	COUNCIL BLF	IA	51501	45	0
A	A	A	LEWIS AND CLARK CC	GODFREY	IL	62035	50	0
A	A	A	JOLIET JUNIOR COLLEGE	JOLIET	IL	60436	140	0
A	A	A	DUPAGE, COLLEGE OF	GLEN ELLYN	IL	60137	316	0
A	A	A	WAUBONSEE CMTY COLLEGE	SUGAR GROVE	IL	60554	326	0
A	A	A	SAUK VALLEY COLLEGE	DIXON	IL	61021	32	0
A	A	A	SEWARD CO CMTY JR COLLEGE	LIBERAL	KS	67901	20	0
A	A	A	COWLEY CO CMTY JR COLLEGE	ARKANSAS CITY	KS	67005	15	0
A	A	A	JOHNSN CO CMTY JR COLLEGE	OVERLAND PARK	KS	66210	380	0
A	A	A	KANSAS CITY KANS CMTY JC	KANSAS CITY	KS	66112	120	0
A	A	A	MT WACHUSETT CMTY COLLEGE	GARDNER	MA	01440	47	0
A	A	A	ANNE ARUNDEL CMTY COLLEGE	ARNOLD	MD	21012	396	0
A	A	A	HARFORD COMMUNITY COLLEGE	BEL AIR	MD	21014	113	0
A	A	A	HAGERSTOWN JUNIOR COLLEGE	HAGERSTOWN	MD	21740	59	0
A	A	A	ALLEGANY CMTY COLLEGE	CUMBERLAND	MD	21502	50	0
A	A	A	BEAL BUSINESS COLLEGE	BANGOR	ME	04401	49	0
A	A	A	NORTHWESTERN MICH COLLEGE	TRAVERSE CITY	MI	49684	26	0
A	A	A	MACOMB CO CC CEN OFFICE	WARREN	MI	48093	300	0
A	A	A	SNT CLAIR CO CMTY COLLEGE	PORT HURON	MI	48060	95	0
A	A	A	GOGEBIC COMMUNITY COLLEGE	IRONWOOD	MI	49938	22	0
A	A	A	SUOMI COLLEGE	HANCOCK	MI	49930	21	0
A	A	A	WEST SHORE CMTY COLLEGE	SCOTTVILLE	MI	49454	9	0
A	A	A	WASHTENAW CMTY COLLEGE	ANN ARBOR	MI	48106	260	0
A	A	A	SAINT LOUIS CC-MERAMEC	KIRKWOOD	MO	63122	175	0
A	A	A	MOBERLY JUNIOR COLLEGE	MOBERLY	MO	65270	2	0
A	A	A	SNT LU CC-FLORISSANT VLY	SAINT LOUIS	MO	63135	236	0
A	A	A	SNT LU CC-FOREST PARK	SAINT LOUIS	MO	63110	200	0
A	A	A	PENN VALLEY CMTY COLLEGE	KANSAS CITY	MO	64111	75	0
A	A	A	PEARL RIVER JR COLLEGE	POPLARVILLE	MS	39470	40	0
A	A	A	JONES CO JUNIOR COLLEGE	ELLISVILLE	MS	39437	69	0
A	A	A	COPIAH-LINCOLN JR COLLEGE	WESSON	MS	39191	27	0
A	A	A	MISS GULF CST JC CEN OFF	PERKINSTON	MS	39573	43	0

DEGREE PROGRAMS

GROUP I (ASSOCIATE) CONTINUED
(AS OF JUNE 30, 1977)

YEAR OFFERED AND DEGREE 1976-77	1977-78	1978-79	NAME OF INSTITUTION	CITY	STATE	ZIPCODE	MAJORS ENROLLED 1976-77 UNDERGRAD	GRADUATE
A	A	A	SOUTHWEST MISS JR COLLEGE	SUMMIT	MS	39666	20	0
A	A	A	ASHEVL BUNCOMBE TECH INST	ASHEVILLE	NC	28801	71	0
A	A	A	DAVIDSON CO CMTY COLLEGE	LEXINGTON	NC	27292	20	0
A	A	A	RICHMOND TECHNICAL INST	HAMLET	NC	28345	26	0
A	A	A	FORSYTH TECHNICAL INST	WINSTON-SALEM	NC	27103	96	0
A	A	A	WAKE TECHNICAL INSTITUTE	RALEIGH	NC	27603	56	0
A	A	A	SOUTHEAST CC MILFORD CAM	MILFORD	NE	68405	53	0
	A	A	PASSAIC CO CMTY COLLEGE	PATERSON	NJ	07509	0	0
A	A	A	NIAGARA CO CMTY COLLEGE	SANBORN	NY	14132	90	0
A	A	A	SUFFOLK CO CMTY COLLEGE	SELDEN	NY	11784	0	0
A	A	A	CUNY BRONX CMTY COLLEGE	BRONX	NY	10453	0	0
A	A	A	SUNY AGRL TECH C COBLESKL	COBLESKILL	NY	12043	100	0
A	A	A	MONROE COMMUNITY COLLEGE	ROCHESTER	NY	14623	200	0
A	A	A	SUNY AGRL & TECH C CANTON	CANTON	NY	13617	67	0
A	A	A	JEFFERSON CMTY COLLEGE	WATERTOWN	NY	13601	27	0
A	A	A	CUNY BORO OF MANHATTAN CC	NEW YORK	NY	10019	522	0
A	A	A	CUYAHOGA CC WESTERN CAM	PARMA HTS	OH	44130	100	0
A	A	A	SINCLAIR CMTY COLLEGE	DAYTON	OH	45402	420	0
A	A	A	NORTHERN OKLAHOMA COLLEGE	TONKAWA	OK	74653	25	0
A	A	A	LANE COMMUNITY COLLEGE	EUGENE	OR	97405	75	0
A	A	A	CHEMEKETA CMTY COLLEGE	SALEM	OR	97303	60	0
A	A	A	NORTHAMPTON CO AREA CC	BETHLEHEM	PA	18017	170	0
A	A	A	PHILADELPHIA, CMTY COLLEG	PHILADELPHIA	PA	19107	90	0
A	A	A	CLEVELAND ST CMTY COLLEGE	CLEVELAND	TN	37311	36	0
A	A	A	WHARTON CO JR COLLEGE	WHARTON	TX	77488	292	0
A	A	A	CISCO JUNIOR COLLEGE	CISCO	TX	76437	40	0
A	A	A	NAVARRO COLLEGE	CORSICANA	TX	75110	12	0
A	A	A	DEL MAR COLLEGE	CORPUS CHRSTI	TX	78404	55	0
A	A	A	TEXAS SOUTHMOST COLLEGE	BROWNSVILLE	TX	78520	50	0
A	A	A	MCLENNAN CMTY COLLEGE	WACO	TX	76708	115	0
A	A	A	PARIS JUNIOR COLLEGE	PARIS	TX	75460	61	0
A	A	A	KILGORE COLLEGE	KILGORE	TX	75662	75	0
A	A	A	TIDEWATER CMTY COLLEGE	PORTSMOUTH	VA	23703	477	0
A	A	A	CENTRAL VA CMTY COLLEGE	LYNCHBURG	VA	24502	72	0
A	A	A	DANVILLE CMTY COLLEGE	DANVILLE	VA	24541	65	0
A	A	A	THOMAS NELSN CMTY COLLEGE	HAMPTON	VA	23670	214	0
A	A	A	NORTHERN VA CMTY COLLEGE	ANNANDALE	VA	22003	122	0
A	A	A	VA WESTERN CMTY COLLEGE	ROANOKE	VA	24015	138	0
A	A	A	J SARGEANT REYNOLDS CC	RICHMOND	VA	23241	481	0
A	A	A	SEATTLE CC CENTRAL CAMPUS	SEATTLE	WA	98122	40	0
	A	A	YAKIMA VALLEY COLLEGE	YAKIMA	WA	98907	0	0
A	A	A	BIG BEND CMTY COLLEGE	MOSES LAKE	WA	98837	40	0
A	A	A	DISTRICT ONE TECH INST	EAU CLAIRE	WI	54701	100	0
A	A	A	MADISON AREA TECH COLLEGE	MADISON	WI	53703	320	0
A	A	A	WESTERN WIS TECH INST	LA CROSSE	WI	54601	43	0
A	A	A	FOX VALLEY TECH INST	APPLETON	WI	54911	150	0
A	A	A	WEST VIRGINIA NORTHERN CC	WHEELING	WV	26003	26	0
A	A	A	WESTERN WYO CMTY COLLEGE	ROCK SPRINGS	WY	82901	26	0
DPR PROGRAM IN DEPT OF ISY								
A	A	A	CITRUS COLLEGE	AZUSA	CA	91702	135	0
DPR PROGRAM IN DEPT OF MAT								
A	A	A	SUFFOLK CO CMTY COLLEGE	SELDEN	NY	11784	0	0
DPR PROGRAM IN DEPT OF NEC								
A	A	A	ESSEX COMMUNITY COLLEGE	BALT COUNTY	MD	21237	354	0
A	A	A	LANSING COMMUNITY COLLEGE	LANSING	MI	48901	195	0
A	A	A	WESTCHESTER CMTY COLLEGE	VALHALLA	NY	10595	55	0
DPR PROGRAM IN DEPT OF SYS								
A	A	A	CHAS S MOTT CMTY COLLEGE	FLINT	MI	48503	0	0
EDP PROGRAM IN DEPT OF DPR								
A	A	A	ODESSA COLLEGE	ODESSA	TX	79760	15	0
ICS PROGRAM IN DEPT OF CIS								
A	A	A	LOS ANG VALLEY COLLEGE	VAN NUYS	CA	91401	36	0
IPR PROGRAM IN DEPT OF IPR								
A	A	A	ESSEX COUNTY COLLEGE	NEWARK	NJ	07102	245	0
ISY PROGRAM IN DEPT OF ISY								
A	A	A	ORANGE COAST COLLEGE	COSTA MESA	CA	92626	358	0
OTH PROGRAM IN DEPT OF BAD								
A	A	A	CENTRAL ARIZONA COLLEGE	COOLIDGE	AZ	85228	21	0
A	A	A	JOHN A LOGAN COLLEGE	CARTERVILLE	IL	62918	0	0
A	A	A	LONGVIEW COMMUNITY COLLEG	LEE'S SUMMIT	MO	64063	65	0
A	A	A	FINGER LAKES,CMTY COLLEGE	CANANDAIGUA	NY	14424	140	0
OTH PROGRAM IN DEPT OF CTE								
A	A	A	COLUMBIA ST CMTY COLLEGE	COLUMBIA	TN	38401	49	0

DEGREE PROGRAMS
GROUP ((ASSOCIATE)) CONTINUED
(AS OF JUNE 30, 1977)

YEAR OFFERED AND DEGREE 1976-77	1977-78	1978-79	NAME OF INSTITUTION	CITY	STATE	ZIPCODE	MAJORS ENROLLED 1976-77 UNDERGRAD	GRADUATE
OTH PROGRAM IN DEPT OF DPR								
A	A	A	IOWA WESTERN CC CEN OFF	COUNCIL BLF	IA	51501	50	0
A	A	A	LEHIGH CO CMTY COLLEGE	SCHNECKSVILLE	PA	18078	64	0
A	A	A	NORTH SEATTLE CC	SEATTLE	WA	98103	125	0
OTH PROGRAM IN DEPT OF EET								
A	A	A	SUFFOLK CO CMTY COLLEGE	SELDEN	NY	11784	0	0
OTH PROGRAM IN DEPT OF MAT								
A	A	A	LONG BEACH CITY COLLEGE	LONG BEACH	CA	90808	0	0
OTH PROGRAM IN DEPT OF NEC								
A	A	A	MONTGOMERY CO COMMUNITY C	BLUE BELL	PA	19422	198	0

DEGREE PROGRAMS

GROUP I (BACHELORS) (AS OF JUNE 30, 1977)

YEAR OFFERED AND DEGREE 1976-77	 1977-78	 1978-79	NAME OF INSTITUTION	CITY	STATE	ZIPCODE	MAJORS ENROLLED 1976-77 UNDERGRAD	 GRADUATE
CPR PROGRAM IN DEPT OF BAD								
A	A	A	PERU STATE COLLEGE	PERU	NE	68421	4	0
CPR PROGRAM IN DEPT OF CPR								
A B	A B	A B	SPRING GARDEN COLLEGE	CHESTNUT HILL	PA	19118	70	0
CPR PROGRAM IN DEPT OF MAT								
A	A	A	ATLANTIC UNION COLLEGE	S LANCASTER	MA	01561	6	0
CSC PROGRAM IN DEPT OF BAD								
A B	A B	A B	MADONNA COLLEGE	LIVONIA	MI	48150	11	0
A	A	A	DAKOTA STATE COLLEGE	MADISON	SD	57042	17	0
A	A	A	DAVIS AND ELKINS COLLEGE	ELKINS	WV	26241	2	0
A	A	A	MORRIS HARVEY COLLEGE	CHARLESTON	WV	25304	35	0
CSC PROGRAM IN DEPT OF COM								
A B	A B	A B	MESA COLLEGE	GRAND JCT	CO	81501	40	0
CSC PROGRAM IN DEPT OF CSC								
B	B	B	LUTHER COLLEGE	DECORAH	IA	52101	15	0
A B	A B	A B	TAYLOR UNIVERSITY	UPLAND	IN	46989	40	0
A	A	A	CALUMET COLLEGE	WHITING	IN	46394	15	0
B	B	B	TRANSYLVANIA UNIVERSITY	LEXINGTON	KY	40508	10	6
A	A	A	COLUMBIA UNION COLLEGE	TAKOMA PARK	MD	20012	2	0
	B	B	MICHIGAN-FLINT,U OF	FLINT	MI	48503	25	0
	B	B	CONCORDIA C AT MOORHEAD	MOORHEAD	MN	56560	10	0
A	A	A	MISSOURI STHN ST COLLEGE	JOPLIN	MO	64801	105	0
A	A	A	NEW ENG AERONAUTICAL INST	NASHUA	NH	03060	0	0
A	A B	A B	SAINT PETERS COLLEGE	JERSEY CITY	NJ	07306	35	0
B	B	B	MOUNT UNION COLLEGE	ALLIANCE	OH	44601	20	0
B	B	B	LOCK HAVEN STATE COLLEGE	LOCK HAVEN	PA	17745	149	0
B	B	B	GENEVA COLLEGE	BEAVER FALLS	PA	15010	60	0
B	B	B	WEST VA INST TECHNOLOGY	MONTGOMERY	WV	25136	55	0
CSC PROGRAM IN DEPT OF DPR								
A	A	A	SAINT FRANCIS COLLEGE	BROOKLYN	NY	11201	75	0
CSC PROGRAM IN DEPT OF MAT								
B	B	B	CENTRAL U OF IOWA	PELLA	IA	50219	3	0
B	B	B	WESTMINSTER COLLEGE	FULTON	MO	65251	3	0
B	B	B	NC AT WILMINGTON, U OF	WILMINGTON	NC	28401	11	0
B	B	B	JUNIATA COLLEGE	HUNTINGDON	PA	16652	3	0
A	A	A	THIEL COLLEGE	GREENVILLE	PA	16125	10	0
A B	A B	A B	FREED-HARDEMAN COLLEGE	HENDERSON	TN	38340	13	0
	B	B	WESTMINSTER COLLEGE	SALT LAKE CY	UT	84105	4	0
B	B	B	HAMPDEN-SYDNEY COLLEGE	HMPDEN-SYDNEY	VA	23943	0	0
B	B	B	MARY BALDWIN COLLEGE	STAUNTON	VA	24401	10	0
CSC PROGRAM IN DEPT OF MSC								
B	B	B	SAINT AMBROSE COLLEGE	DAVENPORT	IA	52803	29	0
B	B	B	CATAWBA COLLEGE	SALISBURY	NC	28144	10	0
B	B	B	DENISON UNIVERSITY	GRANVILLE	OH	43023	15	0
CSC PROGRAM IN DEPT OF NEC								
B	B	B	GRACELAND COLLEGE	LAMONI	IA	50140	21	0
CST PROGRAM IN DEPT OF COM								
A B	A B	A B	OREGON INST OF TECHNOLOGY	KLAMATH FALLS	OR	97601	97	0
CST PROGRAM IN DEPT OF EET								
A	A	A	GA INST TECHN-STHN TECH	MARIETTA	GA	30060	25	0
DPR PROGRAM IN DEPT OF BAD								
B	B	B	LAMBUTH COLLEGE	JACKSON	TN	38301	31	0
A B	A B	A B	SHEPHERD COLLEGE	SHEPHERDSTOWN	WV	25443	91	0
B	B	B	WEST LIBERTY ST COLLEGE	WEST LIBERTY	WV	26074	27	0
DPR PROGRAM IN DEPT OF BUS								
A	A	A	MIDLAND LUTHERAN COLLEGE	FREMONT	NE	68025	6	0
DPR PROGRAM IN DEPT OF DPR								
A	A	A	MESA COLLEGE	GRAND JCT	CO	81501	15	0
A B	A B	A B	DETROIT COLLEGE OF BUS	DEARBORN	MI	48126	125	0
A B	A B	A B	STEED COLLEGE	JOHNSON CITY	TN	37601	45	0
A B	A B	A B	WEBER STATE COLLEGE	OGDEN	UT	84408	80	0
A	A	A	FAIRMONT STATE COLLEGE	FAIRMONT	WV	26554	47	0
DPR PROGRAM IN DEPT OF NEC								
A	A	A	CAMERON UNIVERSITY	LAWTON	OK	73501	55	0
ISC PROGRAM IN DEPT OF BAD								
B	B	B	RICHARD STOCKTON STATE C	POMONA	NJ	08240	75	0
ISC PROGRAM IN DEPT OF CSC								
B	B	B	CHRISTOPHER NEWPORT C	NEWPORT NEWS	VA	23606	0	0

DEGREE PROGRAMS

GROUP (:BACHELORS:) CONTINUED

(AS OF JUNE 30, 1977)

YEAR OFFERED AND DEGREE 1976-77	 1977-78	 1978-79	NAME OF INSTITUTION	CITY	STATE	ZIPCODE	MAJORS ENROLLED 1976-77 UNDERGRAD	 GRADUATE
ISC PROGRAM IN DEPT OF ISC								
A B	A B	A B	QUINCY COLLEGE	QUINCY	IL	62301	4	0
ISY PROGRAM IN DEPT OF BAD								
B	B	B	ROBERT MORRIS COLLEGE	CORAOPOLIS	PA	15108	38	0
ISY PROGRAM IN DEPT OF ISY								
A B	A B	A B	KING'S COLLEGE	WILKES-BARRE	PA	18711	70	0
MSC PROGRAM IN DEPT OF CSC								
B	B	B	US COAST GUARD ACADEMY	NEW LONDON	CT	06320	100	0
OTH PROGRAM IN DEPT OF BAD								
B	B	B	WEST VA INST TECHNOLOGY	MONTGOMERY	WV	25136	93	0
OTH PROGRAM IN DEPT OF CIS								
A	A	B	WASHINGTON TECHNICAL INST	WASHINGTON	DC	20008	320	0
OTH PROGRAM IN DEPT OF COM								
B	B	B	MERCY COLLEGE	DOBBS FERRY	NY	10522	0	0
OTH PROGRAM IN DEPT OF CSC								
B	B	B	MUSKINGUM COLLEGE	NEW CONCORD	OH	43762	0	0
A	A	A	GLENVILLE STATE COLLEGE	GLENVILLE	WV	26351	3	0
OTH PROGRAM IN DEPT OF MAT								
B	B	B	TALLADEGA COLLEGE	TALLADEGA	AL	35160	0	0
B	B	B	WESTMONT COLLEGE	SANTA BARBARA	CA	93108	20	0
		B	ANNHURST COLLEGE	WOODSTOCK	CT	06281	0	0
B	B	B	ALBION COLLEGE	ALBION	MI	49224	12	0
B	B	B	CENTRAL STATE UNIVERSITY	WILBERFORCE	OH	45384	20	0
OTH PROGRAM IN DEPT OF MSC								
B	B	B	WAYNESBURG COLLEGE	WAYNESBURG	PA	15370	17	0
OTH PROGRAM IN DEPT OF NEC								
B	B	B	MD UNIVERSITY COLLEGE , U	COLLEGE PARK	MD	20742	0	0

DEGREE PROGRAMS

GROUP (:MASTERS :)

(AS OF JUNE 30, 1977)

YEAR OFFERED AND DEGREE							MAJORS ENROLLED 1976-77	
1976-77	1977-78	1978-79	NAME OF INSTITUTION	CITY	STATE	ZIPCODE	UNDERGRAD	GRADUATE
CEN PROGRAM IN DEPT OF BAD								
A	A	A	BLACK HILLS STATE COLLEGE	SPEARFISH	SD	57783	16	0
CEN PROGRAM IN DEPT OF EEN								
B M	B M	B M	FLORIDA TECHNOLOGICAL U	ORLANDO	FL	32816	10	20
M	M	M	LOWELL, UNIVERSITY OF	LOWELL	MA	01854	0	20
CIS PROGRAM IN DEPT OF BUS								
B	B	B	SAINT CLOUD ST UNIVERSITY	SAINT CLOUD	MN	56301	25	0
CIS PROGRAM IN DEPT OF CIS								
A B	A B	A B	EASTERN NM U CENTRAL OFF	PORTALES	NM	88130	0	0
A B	A B	A B	LA SALLE COLLEGE	PHILADELPHIA	PA	19141	75	0
CPR PROGRAM IN DEPT OF CIS								
A	A	A	NICHOLLS STATE UNIVERSITY	THIBODAUX	LA	70301	82	0
CPR PROGRAM IN DEPT OF ISY								
A B	A B	A B	PURDUE U CALUMET CAMPUS	HAMMOND	IN	46323	205	0
CPR PROGRAM IN DEPT OF MAT								
B	B	B	HARDING COLLEGE MAIN CAM	SEARCY	AR	72143	10	0
CSC PROGRAM IN DEPT OF BUS								
	B	B	TROY ST U DOTHN-FT RUCKER	DOTHAN	AL	36301	2	0
B	B	B	BETHANY NAZARENE COLLEGE	BETHANY	OK	73008	12	0
CSC PROGRAM IN DEPT OF CCS								
A	A	A	UNION COLLEGE	BARBOURVILLE	KY	40906	0	0
CSC PROGRAM IN DEPT OF CIS								
B	B	B	NICHOLLS STATE UNIVERSITY	THIBODAUX	LA	70301	145	0
B	B	B	SAINT THOMAS, COLLEGE OF	SAINT PAUL	MN	55105	36	0
B	B	B	IONA COLLEGE	NEW ROCHELLE	NY	10801	12	0
B	B	B	CHEYNEY STATE COLLEGE	CHEYNEY	PA	19319	50	0
B M	B M	B M	TRINITY UNIVERSITY	SAN ANTONIO	TX	78284	70	31
	B	B	MARSHALL UNIVERSITY	HUNTINGTON	WV	25701	0	0
CSC PROGRAM IN DEPT OF COM								
B	B	B	KEAN C OF NEW JERSEY	UNION	NJ	07083	275	0
B M	B M	B M	HOUSTON CLEAR LAKE CITY,	HOUSTON	TX	77058	75	124
CSC PROGRAM IN DEPT OF CSC								
B	B	B	ARK AT LITTLE ROCK, U OF	LITTLE ROCK	AR	72204	90	20
B M	B M	B M	CAL STATE U-FULLERTON	FULLERTON	CA	92634	301	79
B M	B M	B M	CAL STATE U-CHICO	CHICO	CA	95929	295	60
B	B	B	CAL STATE POLY U-POMONA	POMONA	CA	91768	80	0
A	A	A	COLUMBUS COLLEGE	COLUMBUS	GA	31907	12	0
B M	B M	B M	BRADLEY UNIVERSITY	PEORIA	IL	61625	100	10
B	B	B	OLIVET NAZARENE COLLEGE	KANKAKEE	IL	60901	10	0
B	B	B	CHICAGO STATE UNIVERSITY	CHICAGO	IL	60628	20	0
B	B	B	ROSE-HULMAN INST OF TECHN	TERRE HAUTE	IN	47803	65	0
A B	A B	A B	EVANSVILLE, UNIVERSITY OF	EVANSVILLE	IN	47702	55	0
B	B	B	ANDERSON COLLEGE	ANDERSON	IN	46011	32	0
A B	A B	A B	KENTUCKY STATE UNIVERSITY	FRANKFORT	KY	40601	109	0
B	B	B	SOUTHERN U A & M C CEN OF	BATON ROUGE	LA	70813	223	0
A B	A B	A B	LOYOLA U IN NEW ORLEANS	NEW ORLEANS	LA	70118	0	0
B	B	B	MOORHEAD STATE UNIVERSITY	MOORHEAD	MN	56560	112	0
B	B	B	SAINT MARY'S COLLEGE	WINONA	MN	55987	8	0
B	B	B	SAINT CLOUD ST UNIVERSITY	SAINT CLOUD	MN	56301	86	0
B M	B M	B M	MANKATO STATE UNIVERSITY	MANKATO	MN	56001	250	25
A B	A B	A B	STHEST MO ST UNIVERSITY	CPE GIRARDEAU	MO	63701	220	0
B M	B M	B M	JACKSON STATE UNIVERSITY	JACKSON	MS	39217	300	30
B	B	B	EASTERN NM U CENTRAL OFF	PORTALES	NM	88130	0	0
B M	B M	B M	NY INST TECHN MAIN CAMPUS	OLD WESTBURY	NY	11568	75	40
B	B	B	VASSAR COLLEGE	POUGHKEEPSIE	NY	12601	3	0
B M	B M	B M	ROCHESTER INST TECHNOLOGY	ROCHESTER	NY	14623	530	160
B	B	B	LONG IS U C W POST CENTER	GREENVALE	NY	11548	62	0
B	B	B	SUNY COLLEGE AT OSWEGO	OSWEGO	NY	13126	291	0
B M	B M	B M	NY INST TECHN NY CTY CAM	NEW YORK	NY	10023	120	20
B M D	B M D	B M D	CUNY CITY COLLEGE	NEW YORK	NY	10031	412	60
B	B	B	ANTIOCH COLLEGE	YELLOW SPG	OH	45387	10	0
B M	B M	B M	WRIGHT ST U CENTRAL OFF	DAYTON	OH	45431	171	76
B	B	B	STHWSTN OKLA STATE U	WEATHERFORD	OK	73096	35	0
B	B	B	WESTMINSTER COLLEGE	NEW WILMINGTN	PA	16142	25	0
A B	A B	A B	SCRANTON, UNIVERSITY OF	SCRANTON	PA	18510	110	0
A B	A B M	A B M	WORLD UNIVERSITY	HATO REY	PR	00917	27	0
B	B	B	FURMAN UNIVERSITY	GREENVILLE	SC	29613	39	0
B	B	B	AUSTIN PEAY ST UNIVERSITY	CLARKSVILLE	TN	37040	0	0
A	A	A B	TENN AT CHATTANOOGA, U OF	CHATTANOOGA	TN	37401	20	0
B	B	B	SNT MARY'S U SAN ANTONIO	SAN ANTONIO	TX	78284	10	0
B	B	B	ANGELO STATE UNIVERSITY	SAN ANGELO	TX	76901	100	0
B	B	B	STHWST TEX ST UNIVERSITY	SAN MARCOS	TX	78666	100	0
B	B	B	AUSTIN COLLEGE	SHERMAN	TX	75090	0	0
B	B	B M	TEX A&I U CORPUS CHRISTI	CORPUS CHRSTI	TX	78411	32	0

INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

DEGREE PROGRAMS
GROUP (:MASTERS :) CONTINUED
(AS OF JUNE 30, 1977)

YEAR OFFERED AND DEGREE 1976-77	1977-78	1978-79	NAME OF INSTITUTION	CITY	STATE	ZIPCODE	MAJORS ENROLLED 1976-77 UNDERGRAD	GRADUATE
	B	B	SEATTLE PACIFIC UNIVERSIT	SEATTLE	WA	98119	50	0
B	B	B	WISCONSIN LA CROSSE, U OF	LA CROSSE	WI	54601	214	0
A	A	A B	WISCONSIN EAU CLAIRE, U O	EAU CLAIRE	WI	54701	40	0
CSC PROGRAM IN DEPT OF ICS								
B	B	B	PITTSBURG STATE UNIVERSIT	PITTSBURG	KS	66762	33	0
CSC PROGRAM IN DEPT OF MAT								
A	A	A	POINT LOMA COLLEGE	SAN DIEGO	CA	92106	20	0
B	B	B	CENTRAL CONN ST COLLEGE	NEW BRITAIN	CT	06050	52	0
A	A	A	WEST GEORGIA COLLEGE	CARROLLTON	GA	30118	0	0
B	B	B	PURDUE U CALUMET CAMPUS	HAMMOND	IN	46323	8	0
A B	A B	A B	WASHBURN U OF TOPEKA	TOPEKA	KS	66621	31	0
B	B	B	NORTHERN MICH UNIVERSITY	MARQUETTE	MI	49855	23	0
B	B	B	CENTRAL MO ST UNIVERSITY	WARRENSBURG	MO	64093	58	0
A	A	A	ALCORN STATE UNIVERSITY	LORMAN	MS	39096	56	0
	B	B	EAST CAROLINA UNIVERSITY	GREENVILLE	NC	27834	0	0
B	B	B	KEARNEY STATE COLLEGE	KEARNEY	NE	68847	55	0
B	B	B	EAST STROUDSBG ST COLLEGE	E STROUDSBURG	PA	18301	80	0
B	B	B	PR MAYAGUEZ U OF	MAYAGUEZ	PR	00708	40	0
B	B	B	STHWST TEX ST UNIVERSITY	SAN MARCOS	TX	78666	110	0
B	B	B	WISCONSIN SUPERIOR,U OF	SUPERIOR	WI	54880	0	0
A B	A B	A B	WEST VA WESLEYAN COLLEGE	BUCKHANNON	WV	26201	13	0
CSC PROGRAM IN DEPT OF MCS								
B	B	B	WESTERN WASH ST COLLEGE	BELLINGHAM	WA	98225	100	0
CSC PROGRAM IN DEPT OF MSC								
B	B M	B M	NORTH FLORIDA, U OF	JACKSONVILLE	FL	32216	387	0
B	B	B	BUTLER UNIVERSITY	INDIANAPOLIS	IN	46208	10	0
B	B	B	INDIANA-PURDUE U AT FORT	FORT WAYNE	IN	46805	19	0
B	B	B	EASTERN KY UNIVERSITY	RICHMOND	KY	40475	10	0
B	B	B	WESTERN KY UNIVERSITY	BOWLING GREEN	KY	42101	86	0
B	B	B	TOWSON STATE UNIVERSITY	BALTIMORE	MD	21204	167	0
B	B	B	NTHWST MO ST UNIVERSITY	MARYVILLE	MO	64468	37	0
A	A	A	MONTANA C MINRL SCI-TECHN	BUTTE	MT	59701	10	0
B	B	B	TRENTON STATE COLLEGE	TRENTON	NJ	08625	60	0
B	B	B	SUNY COLLEGE AT BROCKPORT	BROCKPORT	NY	14420	195	0
CSC PROGRAM IN DEPT OF NEC								
B	B	B	LEWIS UNIVERSITY	LOCKPORT	IL	60441	31	0
B	B	B	LOYOLA COLLEGE	BALTIMORE	MD	21210	46	0
B	B	B	MONMOUTH COLLEGE	W LONG BRANCH	NJ	07764	116	0
	B	B	WILKES COLLEGE	WILKES-BARRE	PA	18703	6	0
CSC PROGRAM IN DEPT OF SCS								
B M	B M	B M	CAL POLY ST U-SN LUIS OB	SN LUIS OBSPO	CA	93407	305	35
CSE PROGRAM IN DEPT OF EEN								
B M	B M	B M	CAL STATE U-LONG BEACH	LONG BEACH	CA	90840	90	30
CST PROGRAM IN DEPT OF IEN								
B M	B M	B M	NEW HAVEN, UNIVERSITY OF	WEST HAVEN	CT	06516	37	40
CST PROGRAM IN DEPT OF MAT								
A	A	A	EDINBORO STATE COLLEGE	EDINBORO	PA	16444	24	0
CTE PROGRAM IN DEPT OF BAD								
A	A	A	INDIANA CENTRAL UNIVERSIT	INDIANAPOLIS	IN	46227	10	0
CTE PROGRAM IN DEPT OF CTE								
A B	A B	A B	INDIANA-PURDUE U AT FORT	FORT WAYNE	IN	46805	620	0
DPR PROGRAM IN DEPT OF BAD								
B	B	B	FORT HAYS ST UNIV	HAYS	KS	67601	38	0
A	A	A	NORTHERN KY UNIVERSITY	HIGHLAND HTS	KY	41076	200	0
A B	A B	A B	MOREHEAD STATE UNIVERSITY	MOREHEAD	KY	40351	53	0
A B	A B	A B	EASTERN KY UNIVERSITY	RICHMOND	KY	40475	121	0
B	B	B	BALTIMORE, UNIVERSITY OF	BALTIMORE	MD	21201	104	0
A B	A B	A B	CENTRAL MO ST UNIVERSITY	WARRENSBURG	MO	64093	128	0
B	B	B	MISS UNIVERSITY FOR WOMEN	COLUMBUS	MS	39701	45	0
B	B	B	CAMPBELL COLLEGE	BUIES CREEK	NC	27506	20	0
A B	A B	A B	ELMIRA COLLEGE	ELMIRA	NY	14901	72	0
B	B	B	WISCONSIN SUPERIOR,U OF	SUPERIOR	WI	54880	70	0
DPR PROGRAM IN DEPT OF BUS								
B	B	B	ARKANSAS STATE U MAIN CAM	STATE UNIV	AR	72467	65	0
A B M	A B M	A B M	EMPORIA STATE UNIV	EMPORIA	KS	66801	74	7
B	B	B	STHWST MO ST UNIVERSITY	SPRINGFIELD	MO	65802	104	0
DPR PROGRAM IN DEPT OF CCM								
A	A	A	NORTHERN MICH UNIVERSITY	MARQUETTE	MI	49855	51	0
DPR PROGRAM IN DEPT OF CSC								
B	B	B	LIVINGSTON UNIVERSITY	LIVINGSTON	AL	35470	70	0

DEGREE PROGRAMS
GROUP (;MASTERS ;) CONTINUED
(AS OF JUNE 30, 1977)

YEAR OFFERED AND DEGREE							MAJORS ENROLLED 1976-77	
1976-77	1977-78	1978-79	NAME OF INSTITUTION	CITY	STATE	ZIPCODE	UNDERGRAD	GRADUATE
DPR PROGRAM IN DEPT OF DPR								
B	B	B	CAL STATE POLY U-POMONA	POMONA	CA	91768	291	0
B	B	B	FLA AGRICULTURAL & MECH.	TALLAHASSEE	FL	32307	65	0
A B	A B	A B	FERRIS STATE COLLEGE	BIG RAPIDS	MI	49307	375	0
B	B	B	WILLIAM CAREY COLLEGE	HATTIESBURG	MS	39401	5	0
DPR PROGRAM IN DEPT OF NEC								
A	A	A	WESTERN KY UNIVERSITY	BOWLING GREEN	KY	42101	55	0
	A	A	LINCOLN UNIVERSITY	JEFFERSON CY	MO	65101	2	0
A	A	A	PR MAYAQUEZ, U OF	MAYAGUEZ	PR	00708	149	0
ICS PROGRAM IN DEPT OF ICS								
B	B	B	NTHESTN ILL UNIVERSITY	CHICAGO	IL	60625	182	0
A B	A B	A B	SAINT JOSEPH'S COLLEGE	RENSSELAER	IN	47978	75	0
IPR PROGRAM IN DEPT OF CIS								
B	B	B	MANSFIELD STATE COLLEGE	MANSFIELD	PA	16933	90	0
ISC PROGRAM IN DEPT OF BAD								
	B	B	NOTRE DAME, COLLEGE OF	BELMONT	CA	94002	0	0
B	B	B	BOISE STATE UNIVERSITY	BOISE	ID	83725	64	0
ISC PROGRAM IN DEPT OF CSC								
B	B	B	ARKANSAS TECH UNIVERSITY	RUSSELLVILLE	AR	72801	55	0
ISC PROGRAM IN DEPT OF ISY								
B	B	B	WSTN CAROLINA UNIVERSITY	CULLOWHEE	NC	28723	39	0
ISC PROGRAM IN DEPT OF MAT								
B	B	B	MARYVILLE COLLEGE	SAINT LOUIS	MO	63141	0	0
ISY PROGRAM IN DEPT OF BAD								
B	B	B	CLARION STATE C CEN OFF	CLARION	PA	16214	25	0
B M	B M	B M	MARYWOOD COLLEGE	SCRANTON	PA	18509	21	89
ISY PROGRAM IN DEPT OF BUS								
B	B	B	JAMES MADISON UNIVERSITY	HARRISONBURG	VA	22801	13	0
ISY PROGRAM IN DEPT OF CIS								
B	B	B	BENTLEY COLLEGE	WALTHAM	MA	02154	125	0
ISY PROGRAM IN DEPT OF ICS								
A B	A B	A B	PITTSBURG STATE UNIVERSIT	PITTSBURG	KS	66762	66	0
ISY PROGRAM IN DEPT OF ISY								
A B	A B	A B	ALABAMA STATE UNIVERSITY	MONTGOMERY	AL	36101	110	0
A B	A B	A B M	QUINNIPIAC COLLEGE	HAMDEN	CT	06518	150	0
B	B	B	SUNY COLLEGE AT BUFFALO	BUFFALO	NY	14222	120	0
B	B	B	VIRGINIA STATE COLLEGE	PETERSBURG	VA	23803	80	0
ISY PROGRAM IN DEPT OF NEC								
B	B	B	WISCONSIN EAU CLAIRE, U O	EAU CLAIRE	WI	54701	160	0
NEC PROGRAM IN DEPT OF NEC								
M	M	M	LONG IS U C W POST CENTER	GREENVALE	NY	11548	0	62
OTH PROGRAM IN DEPT OF BAD								
B	B	B	INDIANA U AT SOUTH BEND	SOUTH BEND	IN	46615	8	0
OTH PROGRAM IN DEPT OF CIS								
B	B	B	SLIPPERY ROCK ST COLLEGE	SLIPPERY ROCK	PA	16057	0	0
OTH PROGRAM IN DEPT OF COM								
B	B	B	CALIFORNIA STATE COLLEGE	CALIFORNIA	PA	15419	80	0
B	B	B	RADFORD COLLEGE	RADFORD	VA	24142	0	0
	B	B	GONZAGA UNIVERSITY	SPOKANE	WA	99258	0	0
OTH PROGRAM IN DEPT OF ENG								
	B	B	TRINITY COLLEGE	HARTFORD	CT	06106	12	0
OTH PROGRAM IN DEPT OF ISY								
B	B	B	AUBURN U AT MONTGOMERY	MONTGOMERY	AL	36109	65	0
OTH PROGRAM IN DEPT OF MAT								
B	B	B	NORTHERN IOWA, U OF	CEDAR FALLS	IA	50613	31	0
B	B	B	EASTERN ILL UNIVERSITY	CHARLESTON	IL	61920	32	0
A	A	A	MANCHESTER COLLEGE	N MANCHESTER	IN	46962	9	0
B	B	B	SAINT FRANCIS COLLEGE	LORETTO	PA	15940	12	0
B	B	B	BEAVER COLLEGE	GLENSIDE	PA	19038	45	0
OTH PROGRAM IN DEPT OF MSC								
B	B	B	WASHINGTON COLLEGE	CHESTERTOWN	MD	21620	10	0

DEGREE PROGRAMS
GROUP (:MASTERS :) CONTINUED
(AS OF JUNE 30, 1977)

YEAR OFFERED AND DEGREE 1976-77	1977-78	1978-79	NAME OF INSTITUTION	CITY	STATE	ZIPCODE	MAJORS ENROLLED 1976-77 UNDERGRAD	GRADUATE
B	B	B	WASHINGTON AND LEE U	LEXINGTON	VA	24450	20	0
OTH PROGRAM IN DEPT OF NEC								
B	B	B	EASTERN ILL UNIVERSITY	CHARLESTON	IL	61920	105	0
B	B	B	DEPAUW UNIVERSITY	GREENCASTLE	IN	46135	20	0
B	B	B	RIDER COLLEGE	LAWRENCEVILLE	NJ	08648	140	0
SAN PROGRAM IN DEPT OF BAD								
A	A	A	NORTHERN STATE COLLEGE	ABERDEEN	SD	57401	20	0
SCS PROGRAM IN DEPT OF SCS								
B	B	B M	WESTERN ILLINOIS UNIVERSI	MACOMB	IL	61455	129	0
SYS PROGRAM IN DEPT OF SYS								
B M	B M	B M	WEST FLORIDA, U OF	PENSACOLA	FL	32504	180	4

DEGREE PROGRAMS

GROUP (;DOCTORATE;)

(AS OF JUNE 30, 1977)

YEAR OFFERED AND DEGREE							MAJORS ENROLLED 1976-77	
1976-77	1977-78	1978-79	NAME OF INSTITUTION	CITY	STATE	ZIPCODE	UNDERGRAD	GRADUATE
CEN PROGRAM IN DEPT OF CSE								
B M D	B M D	B M D	CASE WESTERN RESERVE U	CLEVELAND	OH	44106	115	60
CEN PROGRAM IN DEPT OF EEN								
	M	B M D	ARIZONA, UNIVERSITY OF	TUCSON	AZ	85721	0	15
B M D	B M D	B M D	CAL-DAVIS, U OF	DAVIS	CA	95616	0	0
	B	B	IOWA STATE U SCI & TECHN	AMES	IA	50010	0	0
B	B	B	ILL URBANA CAMPUS,U OF	URBANA	IL	61801	199	0
B M D	B M D	B M D	MASS AMHERST CAMPUS, U OF	AMHERST	MA	01003	150	60
B	B	B	MONTANA STATE UNIVERSITY	BOZEMAN	MT	59717	6	0
CEN PROGRAM IN DEPT OF ENG								
B M	B M	B M	BOSTON UNIVERSITY	BOSTON	MA	02215	100	30
CIS PROGRAM IN DEPT OF CIS								
B M D	B M D	B M D	OHIO STATE U CENTRAL OFF	COLUMBUS	OH	43210	470	176
B M	B M	B M	TEMPLE UNIVERSITY	PHILADELPHIA	PA	19122	100	60
CPR PROGRAM IN DEPT OF SCS								
B	B	B M	UTAH STATE UNIVERSITY	LOGAN	UT	84322	60	0
CSC PROGRAM IN DEPT OF CIS								
B M D	B M D	B M D	ALABAMA IN BIRMINGHAM, U	BIRMINGHAM	AL	35294	50	64
M D	B M D	B M D	MASS AMHERST CAMPUS, U OF	AMHERST	MA	01003	0	71
B	B	B M D	CUNY BROOKLYN COLLEGE	BROOKLYN	NY	11210	360	0
B M	B M	B M	CLEVELAND ST UNIVERSITY	CLEVELAND	OH	44115	180	25
M	B M	B M	OKLA STATE U MAIN CAMPUS	STILLWATER	OK	74074	0	40
CSC PROGRAM IN DEPT OF COM								
M	M	M	ALABAMA,THE U OF	UNIVERSITY	AL	35486	0	12
B	B	B	MAINE AT ORONO, U OF	ORONO	ME	04473	30	0
B	B	B M	NEW HAMPSHIRE,U OF	DURHAM	NH	03824	70	1
B M	B M	B M	FARLGH DCKSN TEANECK CAM	TEANECK	NJ	07666	79	202
B	B	B	TENNESSEE TECHNOLOGICAL U	COOKEVILLE	TN	38501	67	0
CSC PROGRAM IN DEPT OF CSC								
M	M	M	UNIV OF ALABAMA IN HUNTSV	HUNTSVILLE	AL	35807	0	20
M	M	M	ARKANSAS MAIN CAMPUS,U OF	FAYETTEVILLE	AR	72701	0	5
B	B	B	NORTHERN ARIZ UNIVERSITY	FLAGSTAFF	AZ	86001	56	0
M D	M D	M D	STANFORD UNIVERSITY	STANFORD	CA	94305	0	160
M D	M D	M D	CAL-LOS ANGELES, U OF	LOS ANGELES	CA	90024	0	274
B M D	B M D	B M D	SOUTHERN CALIFORNIA, U OF	LOS ANGELES	CA	90007	200	150
M D	M D	M D	COLORADO AT BOULDER,U OF	BOULDER	CO	80309	0	106
M	M	M	HOWARD UNIVERSITY	WASHINGTON	DC	20059	0	28
B M	B M	B M	MIAMI, UNIVERSITY OF	CORAL GABLES	FL	33124	65	20
B	B	B	DRAKE UNIVERSITY	DES MOINES	IA	50311	10	0
B M D	B M D	B M D	IOWA STATE U SCI & TECHN	AMES	IA	50010	302	47
B M D	B M D	B M D	IOWA, UNIVERSITY OF	IOWA CITY	IA	52242	140	70
B M D	B M D	B M D	ILL URBANA CAMPUS,U OF	URBANA	IL	61801	528	224
B M D	B M D	B M D	NORTHWESTERN UNIVERSITY	EVANSTON	IL	60201	93	108
B M D	B M D	B M D	ILLINOIS INSTITUTE OF TEC	CHICAGO	IL	60616	225	120
B M	B M	B M	STHN ILLINOIS U CARBONDL	CARBONDALE	IL	62901	150	25
B M D	B M D	B M D	PURDUE U MAIN CAMPUS	LAFAYETTE	IN	47907	220	110
B M	B M	B M D	INDIANA U AT BLOOMINGTON	BLOOMINGTON	IN	47401	150	70
B M D	B M D	B M D	UNIVERSITY OF KANSAS (LAW	LAWRENCE	KS	66045	151	67
B M D	B M D	B M D	KANSAS STATE UNIVERSITY	MANHATTAN	KS	66506	120	70
B	B	B	NORTHEAST LOUISIANA U	MONROE	LA	71209	32	0
B	B	B	LA STATE U AND A&M C	BATON ROUGE	LA	70803	136	0
B M D	B M D	B M D	WORCESTER POLY INSTITUTE	WORCESTER	MA	01609	200	220
B M D	B M D	B M D	MD COLLEGE PARK CAM, U OF	COLLEGE PARK	MD	20742	464	220
B M D	B M D	B M D	MICHIGAN STATE UNIVERSITY	EAST LANSING	MI	48824	235	57
B M D	B M D	B M D	MINN MNPLS SNT PAUL,U OF	MINNEAPOLIS	MN	55455	200	125
B M D	B M D	B M D	UNIVERSITY OF MISSOURI-RO	ROLLA	MO	65401	215	111
	M	M	MISSOURI-COLUMBIA, U OF	COLUMBIA	MO	65201	0	35
B M	B M	B M	MISSISSIPPI ST UNIVERSITY	MS STATE	MS	39762	132	29
B M	B M	B M	SOUTHERN MISSISSIPPI,U OF	HATTIESBURG	MS	39401	250	25
B	B	B M	MISSISSIPPI MAIN CAM, U C	UNIVERSITY	MS	38677	53	0
B	B	B	MONTANA, UNIVERSITY OF	MISSOULA	MT	59801	55	0
B	B	B	MONTANA STATE UNIVERSITY	BOZEMAN	MT	59717	0	0
B	B M	B M	NC STATE U RALEIGH	RALEIGH	NC	27607	415	7
B M D	B M D	B M D	DUKE UNIVERSITY	DURHAM	NC	27706	50	21
B M D	B M D	B M D	NC AT CHAPEL HILL, U OF	CHAPEL HILL	NC	27514	10	150
B	B	B	ND CENTRAL OFFICE, U OF	GRAND FORKS	ND	58201	110	0
B M	B M	B M	NM INST OF MINING & TECHN	SOCORRO	NM	87801	50	8
B M	B M	B M	SUNY AT ALBANY	ALBANY	NY	12222	123	42
M	M D	M D	ROCHESTER, UNIVERSITY OF	ROCHESTER	NY	14627	0	17
B	B	B	HOFSTRA UNIVERSITY	HEMPSTEAD	NY	11550	123	0
A B	A B	A B	ST JOHN'S UNIVERSITY	JAMAICA	NY	11439	99	0
B M	B M	B M	BOWLING GRN ST U MAIN CAM	BOWLING GREEN	OH	43403	175	35
B	B	B	OHIO UNIVERSITY	ATHENS	OH	45701	50	0
B M	B M	B M	DAYTON, UNIVERSITY OF	DAYTON	OH	45469	125	45
B	B	B	TULSA, UNIVERSITY OF	TULSA	OK	74104	35	0
B M	B M	B M	OREGON MAIN CAMPUS, U OF	EUGENE	OR	97403	130	63
B M D	B M D	B M D	PA STATE UNIV PARK CAMPUS	UNIVERSITY PK	PA	16802	440	67
B	B	B	INDIANA U OF PA MAIN CAM	INDIANA	PA	15701	92	0

DEGREE PROGRAMS

GROUP (:DOCTORATE:) CONTINUED

(AS OF JUNE 30, 1977)

YEAR OFFERED AND DEGREE							MAJORS ENRCLLED 1976-77	
1976-77	1977-78	1978-79	NAME OF INSTITUTION	CITY	STATE	ZIPCODE	UNDERGRAD	GRADUATE
B M D	B M D	B M D	UNIV. OF PITTSBURGH	PITTSBURGH	PA	15260	175	65
B	B	B	SD MAIN CAMPUS, U OF	VERMILLION	SD	57069	58	0
B	B	B M	STEPHEN F AUSTIN STATE U	NACOGDOCHES	TX	75962	150	0
B	B	B	TEXAS CHRISTIAN U	FORT WORTH	TX	76129	48	0
	B	B	SAM HOUSTON ST UNIVERSITY	HUNTSVILLE	TX	77340	0	0
B M D	B M D	B M D	TEXAS A&M UNIVERSITY	COLLEGE STA	TX	77843	475	80
B M D	B M D	B M D	UNIVERSITY OF TEXAS AT AU	AUSTIN	TX	78712	474	164
B	B	B	OLD DOMINION UNIVERSITY	NORFOLK	VA	23508	150	0
B M D	B M D	B M D	VA POLY INST AND STATE U	BLACKSBURG	VA	24061	304	68
M D	B M D	B M D	WASHINGTCN, UNIVERSITY OF	SEATTLE	WA	98195	58	75
B M D	B M D	B M D	WASHINGTON ST UNIVERSITY	PULLMAN	WA	99164	115	50
B M D	B M D	B M D	WISCONSIN MADISON, U OF	MADISON	WI	53706	65	176
B	B M	B M	WYOMING, UNIVERSITY OF	LARAMIE	WY	82071	35	0
CSC PROGRAM IN DEPT OF EEN								
B M	B M	B M	SOUTH FLORIDA,U OF	TAMPA	FL	33620	113	26
B M D	B M D	B M D	POLYTECHNIC INST NEW YORK	BROOKLYN	NY	11201	53	212
CSC PROGRAM IN DEPT OF ENG								
B	B	B	OAKLAND UNIVERSITY	ROCHESTER	MI	48063	175	0
CSC PROGRAM IN DEPT OF ICS								
B	B	B	TEXAS SOUTHERN UNIVERSITY	HOUSTON	TX	77004	232	0
CSC PROGRAM IN DEPT OF IEN								
B	B	B	ARKANSAS MAIN CAMPUS,U OF	FAYETTEVILLE	AR	72701	10	0
B M D	B M D	B M D	ARIZONA STATE UNIVERSITY	TEMPE	AZ	85281	48	25
CSC PROGRAM IN DEPT OF MAT								
B M	B M	B M	ARIZONA STATE UNIVERSITY	TEMPE	AZ	85281	80	30
B	B M	B M	DENVER, UNIVERSITY OF	DENVER	CO	80208	25	12
	B	B	HARTFORD,UNIVERSITY OF	WEST HARTFORD	CT	06117	0	0
B M	B M	B M	FLORIDA STATE UNIVERSITY	TALLAHASSEE	FL	32306	60	6
B	B	B	ILLINOIS STATE UNIVERSITY	NORMAL	IL	61761	36	0
B	B	B	ILL CHICAGO CIRCLE, U OF	CHICAGO	IL	60680	253	0
B	B	B	TULANE U OF LOUISIANA	NEW ORLEANS	LA	70118	20	0
B M D	B M D	B M D	BOSTON UNIVERSITY	BOSTON	MA	02215	15	15
M D	M D	M D	UNIVERSITY OF MICHIGAN	ANN ARBOR	MI	48109	0	0
M	B M	B M	WESTERN MICH UNIVERSITY	KALAMAZOO	MI	49008	0	40
M	M	M	DETROIT, UNIVERSITY OF	DETROIT	MI	48221	0	28
B	B	B	SAINT LOUIS U	SAINT LOUIS	MO	63103	15	0
B M	B M	B M	ND STATE U MAIN CAMPUS	FARGO	ND	58102	53	4
	M	M	OHIO UNIVERSITY	ATHENS	OH	45701	0	2
M	M	M	LEHIGH UNIVERSITY	BETHLEHEM	PA	18015	0	6
CSC PROGRAM IN DEPT OF MSC								
B M	B M	B M	ARKANSAS MAIN CAMPUS,U OF	FAYETTEVILLE	AR	72701	15	10
B	B	B	LOYOLA U OF CHICAGO	CHICAGO	IL	60611	40	0
B M	B M	B M	INDIANA-PURDUE AT INDIANA	INDIANAPOLIS	IN	46205	0	0
B M D	B M D	B M D	RENSSELAER POLY INSTITUTE	TROY	NY	12181	158	42
B	B	B	DREXEL UNIVERSITY	PHILADELPHIA	PA	19104	56	0
B M D	B M D	B M D	TEXAS AT DALLAS,U OF	RICHARDSON	TX	75080	40	85
B M	B M	B M	VIRGINIA COMMONWEALTH U	RICHMOND	VA	23284	20	15
CSC PROGRAM IN DEPT OF NEC								
B M D	B M D	B M D	CAL-SAN DIEGO, U OF	LA JOLLA	CA	92093	200	41
M D	M D	M C	CAL - DAVIS, U OF	DAVIS	CA	95616	0	0
B	B	B	KENT STATE U., KENT CAMPU	KENT	OH	44242	91	0
B M D	B M D	B M C	BROWN UNIVERSITY	PROVIDENCE	RI	02912	51	35
	B	B	WILLIAM & MARY MAIN CAM,	WILLIAMSBURG	VA	23185	60	0
CSC PROGRAM IN DEPT OF SCS								
B M D	B M D	B M D	GEORGIA, UNIVERSITY OF	ATHENS	GA	30602	536	50
B M	B M	B M	RHODE ISLAND,U OF	KINGSTON	RI	02881	18	19
CSE PROGRAM IN DEPT OF COM								
M	M	M	WILLIAM & MARY MAIN CAM,	WILLIAMSBURG	VA	23185	0	50
CSE PROGRAM IN DEPT OF CSC								
B M D	B M D	B M D	WASHINGTON UNIVERSITY	SAINT LOUIS	MO	63130	55	29
CSE PROGRAM IN DEPT OF CSE								
B M D	B M D	B M D	ILL CHICAGO CIRCLE, U OF	CHICAGO	IL	60680	95	25
M	M	M	TEXAS AT ARLINGTON, U OF	ARLINGTON	TX	76019	0	110
CSE PROGRAM IN DEPT OF EEN								
B M D	B M D	B M D	ARIZONA STATE UNIVERSITY	TEMPE	AZ	85281	175	175
B M D	B M D	B M D	CAL-SANTA BARBARA,U OF	SANTA BARBARA	CA	93106	339	227
B	B	B	COLORADO AT BOULDER, U OF	BOULDER	CO	80309	60	0
B	B	B	UNIVERSITY OF HARTFORD	WEST HARTFORD	CT	06117	5	0
B M D	B M D	B M C	MD COLLEGE PARK CAM, U OF	COLLEGE PARK	MD	20742	245	58
CSE PROGRAM IN DEPT OF NEC								
B M D	B M D	B M D	MASSACHUSETTS INST OF TEC	CAMBRIDGE	MA	02139	101	50

DEGREE PROGRAMS
GROUP I (DOCTORATE) CONTINUED
(AS OF JUNE 30, 1977)

YEAR OFFERED AND DEGREE 1976-77	1977-78	1978-79	NAME OF INSTITUTION	CITY	STATE	ZIPCODE	MAJORS ENROLLED 1976-77 UNDERGRAD	GRADUATE
CST PROGRAM IN DEPT OF ENG								
B	B	B	MEMPHIS STATE UNIVERSITY	MEMPHIS	TN	38152	57	0
CST PROGRAM IN DEPT OF NEC								
A	A	A	BOWLING GRN ST FIRELANDS	HURON	OH	44839	10	0
CTE PROGRAM IN DEPT OF BA								
A	A	A	NTHWSTN ST U OF LA	NATCHITOCHES	LA	71457	5	0
CTE PROGRAM IN DEPT OF CTE								
A	A	A	PURDUE U NORTH CENTRAL	WESTVILLE	IN	46391	37	0
A	A	A	TOLEDO,UNIVERSITY OF	TOLEDO	OH	43606	174	0
DPR PROGRAM IN DEPT OF BAD								
B	B	B	NORTHERN ARIZ UNIVERSITY	FLAGSTAFF	AZ	86001	100	0
B	B	B	NORTHEAST LOUISIANA U	MONROE	LA	71209	256	0
M D	M D	M D	UNIV OF MICH	ANN ARBOR	MI	48109	0	39
B	B	B	WESTERN MICH UNIVERSITY	KALAMAZOO	MI	49008	25	0
DPF PROGRAM IN DEPT OF BUS								
A	A	A	AKRON CENTRAL OFF, U OF	AKRON	OH	44325	342	0
DPR PROGRAM IN DEPT OF DPR								
B	B	B	ARKANSAS, U OF	FAYETTEVILLE	AR	72701	76	0
A	A	A	STHN ILLINOIS U CABONDL	CARBONDALE	IL	62901	75	0
DPR PROGRAM IN DEPT OF ENG								
A	A	A	LOUISVILLE,UNIVERSITY OF	LOUISVILLE	KY	40208	65	0
ICS PROGRAM IN DEPT OF BAD								
B	B	B	IDAHO STATE UNIVERSITY	POCATELLO	ID	83209	15	0
ICS PROGRAM IN DEPT OF ICS								
B M D	B M D	B M C	U [illegible] L-IRVINE	IRVINE	CA	92717	270	70
B M D	B M D	B M [illegible]	[illegible] OF TECH MAIN CAM	ATLANTA	GA	30332	250	147
ISC PROGRAM IN DEPT OF BAU								
	B	B	GOLDEN GATE UNIVERSITY	SAN FRANCISCO	CA	94105	20	0
ISC PROGRAM IN DEPT OF ISC								
B M D	B M D	B M D	CAL-SANTA CRUZ, U OF	SANTA CRUZ	CA	95064	77	19
M D	M D	M D	CAL-SAN FRANCISCO, U OF	SAN FRANCISCO	CA	94143	0	3
ISC PROGRAM IN DEPT OF NEC								
M	M	M	CATHOLIC U OF AMERICA	WASHINGTON	DC	20064	0	316
ISY PROGRAM IN DEPT OF BAD								
B	B	B	COLORADO AT BOULDER,U OF	BOULDER	CO	80309	30	0
B	B	B	TOLEDO,UNIVERSITY OF	TOLEDO	OH	43606	30	0
B M D	B M D	B M C	WISCONSIN MADISON, U OF	MADISON	WI	53706	0	18
ISY PROGRAM IN DEPT OF COM								
B M	B M	B M	BOWLING GRN ST U MAIN CAM	BOWLING GREEN	OH	43403	105	8
ISY PROGRAM IN DEPT OF EEN								
B M D	B M D	B M C	STANFORD UNIVERSITY	STANFORD	CA	94305	47	102
ISY PROGRAM IN DEPT OF IEN								
B M D	B M D	B M D	THE UNIVERSITY OF MICHI[illegible]	ANN ARBOR	MI	48109	59	40
ISY PROGRAM IN DEPT OF ISY								
B	B	B	DRAKE UNIVERSITY	DES MOINES	IA	50311	37	0
B	B	B	MD COLLEGE PARK CAM U OF	COLLEGE PARK	MD	20742	78	0
M D	M D	M D	MINN MNPLS SNT PAUL, U OF	MINNEAPOLIS	MN	55455	0	116
B	B	B	MIDDLE TENN ST UNIVERSITY	MURFREESBORO	TN	37130	80	0
B	B	B M	NORTH TEXAS ST UNIVERSITY	DENTON	TX	76203	100	0
A B M	A B M	B M	VIRGINIA COMMONWEALTH U	RICHMOND	VA	23284	190	58
ISY PROGRAM IN DEPT OF NEC								
B	B	B	ARIZONA STATE UNIVERSITY	TEMPE	AZ	85281	160	0
M D	M D	M D	MASSACHUSETTS INST OF TEC	CAMBRIDGE	MA	02139	0	0
OTH PROGRAM IN DEPT OF BAD								
B M D	B M D	B M D	GEORGIA, UNIVERSITY OF	ATHENS	GA	30602	25	5
B M D	B M D	B M D	MINN MNPLS SNT PAUL,U OF	MINNEAPOLIS	MN	55455	443	93
OTH PROGRAM IN DEPT OF CIS								
		B M	SETON HALL UNIVERSITY	SOUTH ORANGE	NJ	07079	0	20
OTH PROGRAM IN DEPT OF CSC								
M D	M D	M C	CAL INST OF TECHNOLOGY	PASADENA	CA	91125	0	12
OTH PROGRAM IN DEPT OF EEN								
D	D	D	SOUTHERN CALIFORNIA, U OF	LOS ANGELES	CA	90007	15	18

DEGREE PROGRAMS
GROUP (:DOCTORATE:) CONTINUED
(AS OF JUNE 30, 1977)

YEAR OFFERED AND DEGREE 1976-77	1977-78	1978-79	NAME OF INSTITUTION	CITY	STATE	ZIPCODE	MAJORS ENROLLED 1976-77. UNDERGRAD	GRADUATE
B	B	B	WESTERN MICH UNIVERSITY	KALAMAZOO	MI	49008	68	0
B M D	B M D	B M C	STEVENS INST TECHNOLOGY	HOBOKEN	NJ	07030	19	50
B M D	B M D	B M D	WISCONSIN MADISON, U OF	MADISON	WI	53706	200	33
OTH PROGRAM IN DEPT OF MSC								
B M D	B M D	B M D	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MD	21218	65	42
OTH PROGRAM IN DEPT OF NEC								
M D	M D	M D	COLO MEDICAL CENTER, U OF	DENVER	CO	80262	0	0
		B	THE CATHOLIC UNIV. OF AME	WASHINGTON	DC	20064	0	0
M	M	M	INDIANA UNIVERSITY	BLOOMINGTON	IN	47401	0	2
B M	B M	B M	SAINT JOHN'S UNIVERSITY	JAMAICA	NY	11439	10	98
OTH PROGRAM IN DEPT OF SCS								
B	B	B	GEORGE WASH UNIVERSITY	WASHINGTON	DC	20052	0	0
SAN PROGRAM IN DEPT OF SAN								
B	B	B	MIAMI UNIVERSITY MAIN CAM	OXFORD	OH	45056	356	0
SCE PROGRAM IN DEPT OF ENG								
B M	B M	B M	LOUISVILLE,UNIVERSITY OF	LOUISVILLE	KY	40208	100	20
SEN PROGRAM IN DEPT OF ENG								
M	M	M	MAINE AT ORONO, U OF	ORONO	ME	04473	0	2
SEN PROGRAM IN DEPT OF IEN								
B M	B M	B M	OHIO UNIVERSITY	ATHENS	OH	45701	85	20
SIS PROGRAM IN DEPT OF IEN								
B	B	B	LOUISIANA TECH UNIVERSITY	RUSTON	LA	71270	108	0
SIS PROGRAM IN DEPT OF SIS								
B M D	B M D	B M D	VANDERBILT UNIVERSITY	NASHVILLE	TN	37240	100	25
SYS PROGRAM IN DEPT OF CSC								
M	M	M	LA STATE U AND A&M C	BATON ROUGE	LA	70803	0	26

VI. SUMMARIES FROM FORM 1: LINES 03-05, 14
EXPENDITURES, SOURCES OF INCOME, STAFF, LANGUAGES
TYPES OF BILLING AND SERVICES

The following variables and levels were used for summarizing the responses:

Type of Control	Highest Degree Offered	Fall 1975 Enrollment Class
1. Public	1. Associate	1. Less than 500
2. Private	2. Bachelor's	2. 500 - 2,499
	3. Master's	3. 2,500 - 9,999
	4. Doctorate	4. 10,000 - 19,999
		5. 20,000 and above

Summaries for the elementary (three-way) groups, the individual levels (one-way) of the control variables, and the total population are presented provided that there were enough institutions included and/or reporting in the category to preclude indentification of the institutions involved (i.e. at least two institutions must have reported in a group for the summary of that group to be included.)

Each group summary is identified by the levels of the three control variables. For example, group (Public, Associate, Below 500) identifies the summary for all public institutions offering at most the associate degree and having had an enrollment of less than 500 students during fall 1975. Since all summaries for FORM 1: lines 03-05, 14 are identical in format, only one will be discussed here as a guide. The total group is chosen for this purpose, i.e. GROUP (, ,).

Eighteen hundred twenty two (1822) of the 3136 institutions (or campuses) reported on at least some part of the inventory. Twelve hundred forty eight (1248) reported something on FORM 1 for a total of 1599 installations. An installation may or may not have had a computer. A few had only a terminal or access to a batch system.

1. Expenditures

Eleven hundred three (1103) of the 1248 institutions and 1358 of the 1599 installations reported something for "Projected Expenditures 1977-78" for a combined total of $531,332,000.

2. Sources of Income for 1976-77

Thirteen hundred twenty seven of the 1599 installations reported that their institutions supplied $418,125,000 of their direct costs during 1976-77. Of the total income (expenditures) of $512,646,000 for 1976-77 the federal government (FEDRL) supplied $37,730,000 to 287 installations in 206 institutions.

3. Staff

These items are straight summations of the numbers reported by the installations.

Eleven hundred thirty five (1135) installations in 968 institutions reported 15,790 full time employees, etc.

4. Types of Services Used

Five hundred nineteen (519) installations reported that they used remote computing services, 659 reported they used interactive computing, etc.

5. Languages Available

Eleven hundred forty three (1143) of the 1599 installations reporting have FORTRAN available.

6. Facilities Management

Only 15 installations reported that they were managed by an outside firm under a "facilities management" contract.

7. User Services

One thousand forty six (1046) of the installations in 861 institutions reported that less than 25% of their staff FTE was designated for "User Services".

8. Type of Billing

Eight hundred two (802) installations reported "No billing (Budgeted Installation)", 209 reported "Billing against funds budgeted and allocated to users for sole purpose" and 88 reported "billing against funds not restricted for that purpose only".

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INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
              CCNDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                            UNDER A GRANT FROM THE NATIONAL SCIENCF FOUNDATION                          PAGE VI-03
    GROUP I                        )
         TOTAL NUMBER OF INSTITUTIONS            = 3136     TOTAL NUMRER OF INSTALLATICNS REPORTED       = 1599
         TOTAL NUMBER OF INSTITUTIONS REPORTING = 1822      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL = 1248

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****        *********** OPERATING  1976-77 *********************************************
      HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  CTHER  ///////// OFF-CAMPUS SERVICES /////////     TOTAL
                                                 LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   CCMMERCIAL    1976-77

       94354    4414          6376     220097  115806    6922   73459            4564       4396           1515   531903

INSTL:   829     393           475       1225     982     470    1101              46         99             54     1394
INST:    652     351           410       1007     868     426     914              45         95             51     1124
(NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENCITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
      1974-75  1975-76   1977-78        INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                              CO-CP/NON-PROF   COL/UNIV   COMMERCIAL

       378950   437835    531332     418125   23857   37730            1667        5135          809  25323  512646

INSTL:   1130     1228      1358       1327     159     287              41          21           21    260    1384
INST:     937     1017      1103       1098     140     206              41          21           21    227    1117
(NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL   PART       MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE       MASTERS       BACHELORS  UNDER  ASSOC  H-S
       TIME   TIME                   LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD   DEG   DIPL
      15790   6682       2653  2584  1858  1322  3226  5844     131   611     560  1465     854  3647  3307   1410  6379

INSTL: 1135    986       1048   741   534   548   784   996      72   350     249   649     340   779   621    560   849
INST:   968    807        904   646   471   444   670   872      71   290     205   556     289   655   524    519   766
(NUMBER REPORTING PER CATEGORY)
                                                                                                   ***  TYPE OF BILLING  ***
**   NUMBER OF INSTALLATIONS WHICH:
          PROVIDE: BASIC,    876:   FORTRAN,    1143:       USE:   INTERACTIVE COMPUTING,       659
                   APL,      316:   GRAPHICS,    334:              REMOTE COMPUTING SERVICES,   519          1:   802
                   COBOL,    947:   RPG,         658        %FTE   0-24  25-49  50-74  75-99                 2:   209
                   PL/I,     407:   OTHER,       575        USER                                             3:    88
                   PLANIT,    15:   PASCAL,      147        SERV   1046     97    133    323
                   LOGO,      13:   TUTOR,        41                                                ***  FACILITIES MGT ***
                   COURSEWRITER,......            92        INSTL: 1046     97    133    323                  15
                                                            INST:   861     90    124    306
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INVENTORY CF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHEB EDUCATICN FOR 1976-77
              CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF PISSCURI-ROLLA
                            UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
    GROUP (PUBLIC:                 ).
         TOTAL NUMBER OF INSTITUTIONS            = 1509     TOTAL NUMBER OF INSTALLATICNS REPCRTED     =  992
         TOTAL NUMBER OF INSTITUTIONS REPORTING =  877      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =  745

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****        *********** OPERATING  1976-77 *********************************************
      HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  OTHER  ///////// OFF-CAMPUS SERVICES /////////     TOTAL
                                                 LEASE    SVCS    OPER  CO-CP/NCN-PROF  COL/UNIV   CCMMERCIAL    1976-77

       64750    2951          5013     168159   89490    5087   56355            2896       3831            152   398684

INSTL:   531     247           335        796     659     313     720              24         51             12      870
INST:    397     216           282        637     573     285     579              24         48             12      676
(NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
      1974-75  1975-76   1977-78        INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   CTHER   TOTAL
                        PROJECTED                              CO-CP/NCN-PROF   COL/UNIV   COMMERCIAL

       286587   332222    406292     314785   23272   23715            1289        5123          592  19531  388307

INSTL:    731      778       858        828     145     201              28          15           14    184     870
INST:     585      622       675        664     126     130              28          15           14    157     675
(NUMBER REPORTING PER CATEGCRY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVFL OF DEGREF (NUMBER OF PEUPLE) *************
       FULL   PART       MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE       MASTERS       BACHFLCRS  UNDER  ASSCC  H-S
       TIME   TIME                   LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD   DEG   DIPL
      12243   4408       1902  1938  1433   985  2527  4447      89   373     403  1074     703  2785  2351   1151  4800

INSTL:  763    610        692   524   396   407   543   669      52   195     183   445     264   527   403    437   574
INST:   637    477        590   451   344   319   453   579      51   150     145   373     217   429   325    401   513
(NUMBER REPORTING PER CATEGORY)
                                                                                                   ***  TYPE OF BILLING  ***
**   NUMBER OF INSTALLATICNS WHICH:
          PROVIDE: BASIC,    540:   FORTRAN,     747:       USE:   INTERACTIVF COMPUTING,       429
                   APL,      223:   GRAPHICS,    236:              REMOTE COMPUTING SERVICES,   376          1:   497
                   COBOL,    655:   RPG,         472        %FTE   0-24  25-49  50-74  75-99                 2:   134
                   PL/I,     318:   OTHER,       387        USER                                             3:    68
                   PLANIT,    12:   PASCAL,      105        SERV    657     63     82    190
                   LOGO,      10:   TUTOR,        32                                                ***  FACILITIFS MGT ***
                   COURSEWRITER,......            74        INSTL:  657     63     82    190                   9
                                                            INST:   525     57     73    178
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 INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                    PAGE VI-04
 . GROUP (PRIVATE:                        )
        TOTAL NUMBER OF INSTITUTIONS             = 1627      TOTAL NUMBER OF INSTALLATIONS REPORTED     =  607
        TOTAL NUMBER OF INSTITUTIONS REPORTING =  945      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =  503

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 ***********************************************
      HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////     TOTAL
                                                LEASE    SVCS    OPER  CO-CP/NON-PROF  COL/UNIV  COMMERCIAL   1976-77

       29604    1463          1363       51938  26316    1835   17104           1668       565          1363    133219

INSTL:   298     346           140         429    323     157     381             22        48            42       524
INST:    255     135           128         370    295     14?     335             21        47            39       448
 (NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
      1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                             CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

        92363   105613    125040     103340     585   14015               378         12          217   5792  124339

INSTL:    399      450       500        499      14      86                13          6            7     76     514
INST:     352      395       428        434      14      76                13          6            7     70     442
 (NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) ************
       FULL  PART     MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE       MASTERS      BACHELORS  UNDER  ASSOC   H-S
       TIME  TIME                 LYST PRGMR PRGMR ATORS COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD   DEG    DIPL
       3547  2274      751   646   425   337   699  1397     42   238     157   391     153   862   956    259  1579

INSTL: 372   376       356   217   138   141   241   327     20   155      66   204      76   252   218    123   275
INST:  331   330       314   195   127   125   217   293     20   140      60   183      72   226   199    118   253
(NUMBER REPORTING PER CATEGORY)

**    NUMBER OF INSTALLATIONS WHICH:                                                            *** TYPE OF BILLING ***
        PROVIDE: BASIC,   336;   FORTRAN,    396;     USE:   INTERACTIVE COMPUTING,      230
                 APL,      93;   GRAPHICS,    98;            REMOTE COMPUTING SERVICES,  143           1:   305
                 COBOL,   292;   RPG,        186      %FTE   0-24  25-49  50-74  75-99                 2:    75
                 PL/I,     89;   OTHER,      188      USER                                             3:    20
                 PLANIT,    3;   PASCAL,      42      SERV    389     34     51    133
                 LOGO,      3;   TUTOR,        9                                                   *** FACILITIES MGT ***
                 COURSEWRITER,.....           18      INSTL:  389     34     51    133                     6
                                                      INST:   336     33     51    128


 INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
   GROUP (        ASSOCIATE:              )
        TOTAL NUMBER OF INSTITUTIONS             = 1196      TOTAL NUMBER OF INSTALLATIONS REPORTED     =  431
        TOTAL NUMBER OF INSTITUTIONS REPORTING =  655      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =  424

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 ***********************************************
      HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////     TOTAL
                                                LEASE    SVCS    OPER  CO-CP/NON-PROF  COL/UNIV  COMMERCIAL   1976-77

       10632     545          1619       29308  17110    1148    8190            327       321           154     69354

INSTL:   163      76           101         329    277     121     276             12        20            12       361
INST:    162      75           101         325    275     120     276             12        18            12       356
 (NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
      1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                             CO-CP/NON-PROF   COL/UNIV   COMMERCIAL

        43942    54753     69491      58315    4285     916               319       1062            8   1561   66466

INSTL:    295      318       357        352      44      27                 8          1            1     41     359
INST:     294      316       354        348      44      26                 8          1            1     41     354
 (NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) ************
       FULL  PART     MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE       MASTERS      BACHELORS  UNDER  ASSOC   H-S
       TIME  TIME                 LYST PRGMR PRGMR ATORS COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD   DEG    DIPL
       2212   700      438   354   199   134   487   801      8    25      43   222      95   349   257    544   959

INSTL: 312   229       273   182   111   101   183   272      3    24      34   143      65   163    92    231   236
INST:  310   226       271   180   111   101   183   270      3    24      34   143      65   163    91    231   236
(NUMBER REPORTING PER CATEGORY)

**    NUMBER OF INSTALLATIONS WHICH:                                                            *** TYPE OF BILLING ***
        PROVIDE: BASIC,   188;   FORTRAN,    289;     USE:   INTERACTIVE COMPUTING,      130
                 APL,      65;   GRAPHICS,    39;            REMOTE COMPUTING SERVICES,  130           1:   233
                 COBOL,   285;   RPG,        251      %FTE   0-24  25-49  50-74  75-99                 2:    28
                 PL/I,     87;   OTHER,      135      USER                                             3:     5
                 PLANIT,    2;   PASCAL,       6      SERV    293     17     28     93
                 LOGO,      1;   TUTOR,       10                                                   *** FACILITIES MGT ***
                 COURSEWRITER,.....           24      INSTL:  293     17     28     93                     4
                                                      INST:   290     17     27     93
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                    CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
    GROUP (        BACHELORS;              )
         TOTAL NUMBER OF INSTITUTIONS              =  801      TOTAL NUMBER OF INSTALLATIONS REPORTED      =  310
         TOTAL NUMBER OF INSTITUTIONS REPORTING =  461      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =  290

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

       **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 ***********************************************
       HDWARE SFTWARE BLDGS & FURN       STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////      TOTAL
                                                 LEASE   SVCS    OPER  CO-CP/NON-PROF  COL/UNIV  COMMERCIAL    1976-77

         4681     370          663       9178    5896     584    3150            169       336          144      25171

INSTL:    142      65           69        208     165      61     197             10        31           20        270
INST:     134      62           66        196     161      59     188             10        31           19        255
 (NUMBER REPORTING PER CATEGORY)

       * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
       1974-75  1975-76   1977-78        INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                         PROJECTED                              CO-CP/NON-PROF   COL/UNIV   COMMERCIAL

         13440    17429     22920       20804     285    2058              39          27            2   1123   24338

INSTL:     199      225       259         257       4      37               5           3            1     21     265
INST:      188      213       244         245       4      35               5           3            1     21     252
 (NUMBER REPORTING PER CATEGORY)

 ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
        FULL  PART      MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE        MASTERS       BACHELORS  UNDER  ASSOC  H-S
        TIME  TIME                  LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD   DEG   DIPL
         780   611       233   132   83    53   172   345       9    80      32    95      57   180   282     88   371

 INSTL: 187   180       172    83   53    42   101   162       8    70      26    76      34   104    96     54   131
 INST:  180   174       166    81   52    42   100   157       8    70      25    75      34   101    94     54   129
 (NUMBER REPORTING PER CATEGORY)

 **   NUMBER OF INSTALLATIONS WHICH:                                                          ***  TYPE OF BILLING  ***
          PROVIDE: BASIC,    181;   FORTRAN,    206;      USE:   INTERACTIVE COMPUTING,        124
                   APL,       44;   GRAPHICS,    37;             REMOTE COMPUTING SERVICES,     96           1:  167
                   COBOL,    154;   RPG,        100       %FTE   0-24  25-49  50-74  75-99                   2:   30
                   PL/I,      56;   OTHER,       73       USER                                               3:    5
                   PLANIT,     1;   PASCAL,      15       SERV    203     14     30     63
                   LOGO,       0;   TUTOR,        5                                                    *** FACILITIES MGT ***
                   COURSEWRITER,......           12       INSTL:  203     14     30     63                       1
                                                          INST:   195     14     29     63


  INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                    CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
    GROUP (        MASTERS;               )
         TOTAL NUMBER OF INSTITUTIONS              =  717      TOTAL NUMBER OF INSTALLATIONS REPORTED      =  363
         TOTAL NUMBER OF INSTITUTIONS REPORTING =  422      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =  314

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

       **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 ***********************************************
       HDWARE SFTWARE BLDGS & FURN       STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////      TOTAL
                                                 LEASE   SVCS    OPER  CO-CP/NON-PROF  COL/UNIV  COMMERCIAL    1976-77

        13247     861          986      30669   16849    1207    9135            247       786          590      74577

INSTL:    186      87          114        291     236      98     256             12        36           15        322
INST:     172      84          109        263     225      96     234             12        34           15        285
 (NUMBER REPORTING PER CATEGORY)

       * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
       1974-75  1975-76   1977-78        INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                         PROJECTED                              CO-CP/NON-PROF   COL/UNIV   COMMERCIAL

         46819    57242     73536       64799    2651    1175             183          26           36   1200   70070

INSTL:     259      291       314         315      15      41              12           5            6     56     321
INST:      239      267       279         279      15      36              12           5            6     56     284
 (NUMBER REPORTING PER CATEGORY)

 ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
        FULL  PART      MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE        MASTERS       BACHELORS  UNDER  ASSOC  H-S
        TIME  TIME                  LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD   DEG   DIPL
        2455  1384       490   417  280   168   514  1048      32   104      64   229     152   562   624    171  1083

 INSTL: 277   233       267   187  135   121   199   248      18    78      45   156      73   195   173     98   218
 INST:  257   215       250   178  129   117   190   234      18    78      45   148      72   185   167     97   207
 (NUMBER REPORTING PER CATEGORY)

 **   NUMBER OF INSTALLATIONS WHICH:                                                          ***  TYPE OF BILLING  ***
          PROVIDE: BASIC,    229;   FORTRAN,    270;      USE:   INTERACTIVE COMPUTING,        158
                   APL,       88;   GRAPHICS,    71;             REMOTE COMPUTING SERVICES,    140           1:  213
                   COBOL,    237;   RPG,        164       %FTE   0-24  25-49  50-74  75-99                   2:   46
                   PL/I,      94;   OTHER,      127       USER                                               3:    8
                   PLANIT,     5;   PASCAL,      29       SERV    214     18     36     95
                   LOGO,       4;   TUTOR,       13                                                    *** FACILITIES MGT ***
                   COURSEWRITER,......           26       INSTL:  214     18     36     95                       3
                                                          INST:   195     17     36     92
 INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                         CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                                     UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                            PAGE VI-06
    GROUP (         DOCTORATE:              )
          TOTAL NUMBER OF INSTITUTIONS             =  422      TOTAL NUMBER OF INSTALLATIONS REPORTED      =  495
          TOTAL NUMBER OF INSTITUTIONS REPORTING =  284      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =  220

 **   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS    **

        **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 *****************************************************
        HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////       TOTAL
                                                   LEASE     SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL    1976-77

         65794    2638          3108      150942   75951     3983   52984            3821       2953            627   362801

 INSTL:    338     165           191         397     304      190     372              12         12              7      441
 INST:     184     130           134         223     207      151     216              11         12              5      228
 (NUMBER REPORTING PER CATEGORY)

        * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 *****************
        1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                           PROJECTED                            CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

         274749   308411    365385     274207   16636   33581              1126       4020            763   21439  351772

 INSTL:     377      394       428        403      96     182                16         12             13     142     439
 INST:      216      221       226        226      77     109                16         12             13     109     227
 (NUMBER REPORTING PER CATEGORY)

 ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS             ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
        FULL  PART      MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE        MASTERS        BACHELORS  UNDER  ASSOC  H-S
        TIME  TIME                  LYST PRGMR PRGMR ATORS  COM-SC OTHER   COM-SC OTHER   COM-SC OTHER  GRAD   DEG   DIPL
       10343  3987      1492  1681  1296   967  2053  3650      82   402      421   919      552  2556  2144    607  3966

 INSTL:  359   344       336   289   235   284   301   314      43   178      144   274      168   317   260    177   264
 INST:   221   192       217   207   179   184   197   211      42   118      101   190      118   206   172    137   194
 (NUMBER REPORTING PER CATEGORY)

 **   NUMBER OF INSTALLATIONS WHICH:                                                                 ***  TYPE OF BILLING  ***
          PROVIDE: BASIC,    278:   FORTRAN,     378:      USE:   INTERACTIVE COMPUTING,         247
                   APL,      119:   GRAPHICS,    187:             REMOTE COMPUTING SERVICES,     153             1:   [illegible]
                   COBOL,    271:   RPG,         143       %FTE   0-24   25-49   50-74   75-99                    2:   105
                   PL/I,     170:   OTHER,       240       USER                                                  3:    70
                   PLANIT,     7:   PASCAL,       97       SERV    336      48      39      72
                   LOGO,       8:   TUTOR,        13                                                         ***  FACILITIES MGT ***
                   COURSEWRITER,.....             30       INSTL:  336      48      39      72                         7
                                                           INST:   181      42      32      58


  INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                         CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                                     UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
    GROUP (                   BELOW 500  )
          TOTAL NUMBER OF INSTITUTIONS             =  662      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   79
          TOTAL NUMBER OF INSTITUTIONS REPORTING =  392      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   76

 **   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS    **

        **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 *****************************************************
        HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////       TOTAL
                                                   LEASE     SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL    1976-77

           313      22            84        1521     867       89     212               1          6             69     3184

 INSTL:     19      10            14          36      25       12      27               1          3             12       55
 INST:      19      10            14          35      24       12      26               1          3             11       53
 (NUMBER REPORTING PER CATEGORY)

        * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 *****************
        1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                           PROJECTED                            CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

           2004     2313      3149       2901       0      87                 0          0              2      34    3024

 INSTL:      29       37        53         52       0       7                 0          0              1       3      53
 INST:       29       36        52         51       0       7                 0          0              1       3      52
 (NUMBER REPORTING PER CATEGORY)

 ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS             ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
        FULL  PART      MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE        MASTERS        BACHELORS  UNDER  ASSOC  H-S
        TIME  TIME                  LYST PRGMR PRGMR ATORS  COM-SC OTHER   COM-SC OTHER   COM-SC OTHER  GRAD   DEG   DIPL
         108    74        30    20     7     8    21    57       0    13        0    18        1    40    20      7    70

 INSTL:   23    34        20     9     3     7    11    22       0    11        0    15        1    20    13      5    16
 INST:    22    33        19     9     3     7    11    21       0    11        0    15        1    19    13      5    16
 (NUMBER REPORTING PER CATEGORY)

 **   NUMBER OF INSTALLATIONS WHICH:                                                                 ***  TYPE OF BILLING  ***
          PROVIDE: BASIC,     32:   FORTRAN,      27:      USE:   INTERACTIVE COMPUTING,          24
                   APL,        6:   GRAPHICS,      4:             REMOTE COMPUTING SERVICES,      20             1:    34
                   COBOL,     15:   RPG,          15       %FTE   0-24   25-49   50-74   75-99                   2:     4
                   PL/I,       7:   OTHER,        16       USER                                                  3:     0
                   PLANIT,     0:   PASCAL,        0       SERV     67       1       4       7
                   LOGO,       0:   TUTOR,         2                                                         ***  FACILITIES MGT ***
                   COURSEWRITER,.....              0       INSTL:   67       1       4       7                         1
                                                           INST:    66       1       4       7
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                  CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA                        PAGE VI-07
                           UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
   GROUP (                 500-2499   )
       TOTAL NUMBER OF INSTITUTIONS           = 1382     TOTAL NUMBER OF INSTALLATICNS REPORTED      =  604
       TOTAL NUMBER OF INSTITUTIONS REPORTING =  779     TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =  559

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 ***************************************************
      HDWARE SFTWARE BLDGS & FURN       STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////     TOTAL
                                               LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV  COMMERCIAL    1976-77

       13551    929         1680        25191  11936    1229    7166             776       806         336     63600

INSTL:   255    124          136          432    325     131     373              22        56          31       518
INST:    239    118          130          403    316     127     354              22        55          30       482
(NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
      1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                             CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

        38302    45801     59975      49918    3198    4779              104          4            14   2023   60040

INSTL:    403      449       503        503      25      67               12          2             2     59     516
INST:     382      426       466        471      25      63               12          2             2     57     481
(NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
      FULL  PART      MGMT  CLRK  ANA-  SYS   APPL  OPER-   DOCTORATE       MASTERS        BACHELORS  UNDER  ASSOC  H-S
      TIME  TIME                  LYST PRGMR PRGMR  ATORS  COM-SC OTHER  COM-SC OTHER   COM-SC OTHER   GRAD   DEG   DIPL
      2080  1063       494   356   198   131   453   881      16   133      59   263      100   463    478    263   934

INSTL: 390   320       340   177   100    92   202   317      16   112,     50   174       64   209    161    156   266
INST:  370   303       325   171    97    90   195   303      16   111      49   168       63   201    158    154   253
(NUMBER REPORTING PER CATEGORY)
                                                                                                *** TYPE OF BILLING ***
**   NUMBER OF INSTALLATIONS WHICH:
        PROVIDE: BASIC,   302:   FORTRAN,    393:      USE:   INTERACTIVE COMPUTING,       209
                 APL,      84:   GRAPHICS,    66:             REMOTE COMPUTING SERVICES,  188         1:   311
                 COBOL,   309:   RPG,        219      %FTE   0-24  25-49  50-74  75-99                 2:    65
                 PL/I,     85:   OTHER,      152      USER                                             3:    17
                 PLANIT,    2:   PASCAL,      26      SERV    404     23     53    124
                 LOGO,      1:   TUTOR,        9                                                   *** FACILITIES MGT ***
                 COURSEWRITER,.....           17      INSTL:  404     23     53    124                        5
                                                      INST:   383     23     53    123
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INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, ANO INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATICN FOR 1976-77
                  CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                           UNDER A GRANT FROM THE NATIONAL SCIENCE FCUNDATION
   GROUP (                 2500-9999  )
       TOTAL NUMBER OF INSTITUTIONS           =  775     TOTAL NUMBER OF INSTALLATIONS REPORTED      =  486
       TOTAL NUMBER OF INSTITUTIONS REPORTING =  443     TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =  420

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS CF DOLLARS   **

      **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 ***************************************************
      HDWARE SFTWARE BLDGS & FURN       STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////     TOTAL
                                               LEASE    SVCS    OPER  CO-CP/NON-PROF  COL/UNIV  COMMERCIAL    1976-77

       25685   1272         2101        61593  37402    2327   15031            1884      2280        1110    154685

INSTL:   266    124          163          418    366     168     386              16        31          11       445
INST:    244    119          151          379    348     160     355              15        28          10       397
(NUMBER REPORTING PER CATEGCRY)

      * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
      1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                             CO-CP/NON-PROF   COL/UNIV   COMMERCIAL

       102392   123079    152618     123478    6052    7210              351         30            35   6014  143170

INSTL:    374      408       438        434      52      69               12          6             6     94     442
INST:     341      369       393        390      52      65               12          6             6     90     395
(NUMBER REPORTING PER CATEGORY)

** NUMBER CF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
      FULL  PART      MGMT  CLRK  ANA-  SYS   APPL  OPER-   DOCTORATE       MASTERS        BACHELORS  UNDER  ASSOC  H-S
      TIME  TIME                  LYST PRGMR PRGMR  ATORS  COM-SC OTHER  COM-SC OTHER   COM-SC OTHER   GRAD   DEG   DIPL
      4598  2217       825   766   582   330   919  1766      45   131     174   383      247  1036    959    508  2097

INSTL: 404   328       393   295   224   202   303   381      16    93      76   230      121   287    226    222   342
INST:  384   300       368   283   214   193   286   359      16    88      73   220      118   268    211    218   328
(NUMBER REPORTING PER CATEGORY)
                                                                                                *** TYPE OF BILLING ***
**   NUMBER OF INSTALLATIONS WHICH:
        PROVIDE: BASIC,   293:   FORTRAN,    390:      USE:   INTERACTIVE COMPUTING,       209
                 APL,     118:   GRAPHICS,   106:             REMOTE COMPUTING SERVICES,  157         1:   273
                 COBOL,   379:   RPG,        275      %FTE   0-24  25-49  50-74  75-99                 2:    65
                 PL/I,    165:   OTHER,      204      USER                                             3:    18
                 PLANIT,    5:   PASCAL,      40      SERV    282     29     47    128
                 LOGO,      3:   TUTOR,       18                                                   *** FACILITIES MGT ***
                 COURSEWRITER,.....           45      INSTL:  282     29     47    128                        1
                                                      INST:   255     29     43    123
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                   CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                               UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
    GROUP (                  10000-19999)
         TOTAL NUMBER OF INSTITUTIONS           =  205      TOTAL NUMBER OF INSTALLATIONS REPORTED      =  189
         TOTAL NUMBER OF INSTITUTIONS REPORTING =  131      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL  =  121

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

       **** CAPITAL  1976-77  ****        *********** OPERATING  1976-77 ************************************************
       HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////    TOTAL
                                                  LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

        16344    1043          778        49289   22830    1508   16958            578        342            0    109670

INSTL:    117      63           80          152     131      81     137              5          5            0       161
INST:      87      56           70          118     110      73     108              5          5            0       120
 (NUMBER REPORTING PER CATEGORY)

       * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
       1974-75  1975-76   1977-78        INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                          PROJECTED                             CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

         79843    93231    120051       86744    8447    8348            730        1127          448   3309  109153

INSTL:     137      141       156         141      36      46              7           6            6     47     157
INST:      114      114       119         114      33      32              7           6            6     43     116
 (NUMBER REPORTING PER CATEGORY)

 ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS             ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART      MGMT  CLRK  ANA-  SYS   APPL  OPER-   DOCTORATE       MASTERS       BACHELORS   UNDER  ASSOC  H-S
       TIME  TIME                  LYST  PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD    DEG   DIPL
       3305  1299       516   518   353   288   730  1252       26   104      86   278     177   752   669    255  1242

 INSTL: 150   133       147   132   102   107   129   139       16    50      40   106      64   123    96     88   118
 INST:  119   105       121   112    91    87   108   117       16    40      38    90      59   103    81     83   104
 (NUMBER REPORTING PER CATEGORY)

 **    NUMBER OF INSTALLATIONS WHICH:                                                                *** TYPE OF BILLING ***
           PROVIDE: BASIC,    128:   FORTRAN,      154:       USE:   INTERACTIVE COMPUTING,        92
                    APL,       56:   GRAPHICS,      70:              REMOTE COMPUTING SERVICES,    74          1:   86
                    COBOL,    128:   RPG,           82        %FTE   0-24  25-49  50-74  75-99                 2:   31
                    PL/I,      71:   OTHER,         91        USER                                             3:   16
                    PLANIT,     4:   PASCAL,        39        SERV    127     18      9     35
                    LOGO,       4:   TUTOR,          3                                                   *** FACILITIES MGT ***
                    COURSEWRITER......              13        INSTL:  127     18      9     35                  5
                                                              INST:    94     15      9     32
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                   CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                               UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
    GROUP (                  ABOVE 20000)
         TOTAL NUMBER OF INSTITUTIONS           =  112      TOTAL NUMBER OF INSTALLATIONS REPORTED      =  241
         TOTAL NUMBER OF INSTITUTIONS REPORTING =   77      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL  =   72

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

       **** CAPITAL  1976-77  ****        *********** OPERATING  1976-77 ************************************************
       HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////    TOTAL
                                                  LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

        38461    1148         1733        82503   42771    1769   30092           1325        962            0    200764

INSTL:    172      72           82          187     135      78     178              2          4            0       215
INST:      63      48           45           72      70      54      71              2          4            0        72
 (NUMBER REPORTING PER CATEGORY)

       * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
       1974-75  1975-76   1977-78        INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                          PROJECTED                             CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

        156209   173411    195539      155084    6160   17306            482        3974          310  13943  197259

INSTL:     187      193       208         197      46      98             10           7            6     57     216
INST:       71       72        73          72      30      39             10           7            6     34      73
 (NUMBER REPORTING PER CATEGORY)

 ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS             ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART      MGMT  CLRK  ANA-  SYS   APPL  OPER-   DOCTORATE       MASTERS       BACHELORS   UNDER  ASSOC  H-S
       TIME  TIME                  LYST  PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD    DEG   DIPL
       5699  2029       788   924   718   565  1103  1888       44   230     241   523     331  1356  1181    377  2036

 INSTL: 168   171       148   128   105   140   139   137       24    84      83   124      90   140   125     89   107
 INST:   73    66        71    71    66    67    70    72       23    40      45    63      48    64    61     59    65
 (NUMBER REPORTING PER CATEGORY)

 **    NUMBER OF INSTALLATIONS WHICH:                                                                *** TYPE OF BILLING ***
           PROVIDE: BASIC,    121:   FORTRAN,      179:       USE:   INTERACTIVE COMPUTING,       125
                    APL,       52:   GRAPHICS,      88:              REMOTE COMPUTING SERVICES,    80          1:   98
                    COBOL,    116:   RPG,           67        %FTE   0-24  25-49  50-74  75-99                 2:   44
                    PL/I,      79:   OTHER,        112        USER                                             3:   37
                    PLANIT,     4:   PASCAL,        42        SERV    166     26     20     29
                    LOGO,       5:   TUTOR,          9                                                   *** FACILITIES MGT ***
                    COURSEWRITER......              17        INSTL:  166     26     20     29                  3
                                                              INST:    63     22     15     21
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  INVENTORY OF COMPUTFRS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHEP EDUCATION FOR 1976-77
                     CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA                          PAGE VI-09
                                  UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
     GROUP (PUBLIC; ASSOCIATE;BELOW 500  )
           TOTAL NUMBER OF INSTITUTIONS            =   52      TOTAL NUMBER OF INSTALLATIONS REPORTED      =    9
           TOTAL NUMBER OF INSTITUTIONS REPORTING =    28      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =    9

 **   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

        **** CAPITAL  1976-77  ****        *********** OPERATING  1976-77 ****************************************************
        HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARF  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICFS ////////      TOTAL
                                                   LEASE   SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

            1       0          1            59      34      20       6              0         0            20       141

 INSTL:     1       0          1             2       3       1       2              0         0             2         5
 INST:      1       0          1             2       3       1       2              0         0             2         5
 (NUMBER REPORTING PER CATEGORY)

        * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLAKS) 1976-77 *****************
        1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                           PROJECTED                            CO-CP/NCN-PROF   COL/UNIV   COMMERCIAL

            88       85       147        128      0       6              0          0           0       0      134

 INSTL:      2        2         6          5      0       1              0          0           0       0        5
 INST:       2        2         6          5      0       1              0          0           0       0        5
 (NUMBER REPORTING PER CATEGCRY)

 ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
          FULL  PART     MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE        MASTERS      BACHELORS  UNDER  ASSOC  H-S
          TIME  TIME                 LYST PRGMR PRGMR ATORS  COM-SC OTHER  CCM-SC OTHER  COM-SC OTHER  GRAD   DEG   DIPL
            3     4   .    0     1     0    1     0     1       0     2       0     2       0     1     1      0      2

 INSTL:     1     4        0     1     0    1     0     1       0     2       0     2       0     1     1      0      1
 INST:      1     4        0     1     0    1     0     1       0     2       0     2       0     1     1      0      1
 (NUMBER REPORTING PER CATEGORY)

 **    NUMBER OF INSTALLATIONS WHICH:                                                               *** TYPE OF BILLING ***
         PROVIDE: BASIC,     4:   FORTRAN,       4:      USE:   INTERACTIVE COMPUTING,         4
                  APL,       2:   GRAPHICS,      1:             REMOTE COMPUTING SERVICFS,     6          1:     6
                  COBOL,     4:   RPG,           3       %FTE   0-24   25-49  50-74  75-99                2:     0
                  PL/I,      2:   OTHER,         2       USER                                             3:     0
                  PLANIT,    0:   PASCAL,        0       SERV     8      0      0      1
                  LOGO,      0:   TUTOR,         1                                                     *** FACILITIES MGT ***
                  COURSEWRITER,.....             0       INSTL:   8      0      0      1                        0
                                                         INST:    8      0      0      1


  INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                     CONDUCTED BY THE COMPUTER SCIFNCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                                  UNDER A GRANT FROM THE NATIONAL SCIENCE FCUNDATION
     GROUP (PUBLIC; ASSOCIATE;500-2499    )
           TOTAL NUMBER OF INSTITUTIONS            =  448      TOTAL NUMBER OF INSTALLATIONS REPORTED      =  172
           TOTAL NUMBER OF INSTITUTIONS REPORTING =   249      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =  172

 **   ESTIMATED TOTAL EXPENDITLRES IN THOUSANDS CF DCLLARS   **

        **** CAPITAL  1976-77  ****        *********** OPERATING  1976-77 ****************************************************
        HDWARE SFTWARE BLCGS & FURN        STAFF  HDWARF  SFTWARE  OTHER  //////// OFF-CAMPUS SEFVICES ////////      TOTAL
                                                   LEASE   SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

          2229     100        651          4151    2051     159    1036             61       107            73     10618

 INSTL:     55      24         30           124      92      32     102              5        10             6       140
 INST:      55      24         30           124      92      32     102              5        10             6       140
 (NUMBER REPORTING PER CATEGORY)

        * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 *****************
        1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                           PRCJECTED                            CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

          5580     7025      9265        8774    324     605             61          0           0     255    10019

 INSTL:    113      124       138         139     18       9              5          0           0      14      141
 INST:     113      124       138         139     18       9              5          0           0      14      141
 (NUMBER REPORTING PER CATEGORY)

 ** NUPBER CF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVEL OF DEGREE (NUMBER OF PECPLE) *************
          FULL  PART     MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE        MASTERS      BACHELORS  UNDER  ASSOC  H-S
          TIME  TIME                 LYST PRGMR PRGMR ATORS  COM-SC OTHER  CCM-SC OTHER  COM-SC OTHER  GRAD   DEG   DIPL
           354   148      106    65    17   30    68   126       2    10      17    55      23    52    28    105    140

 INSTL:    116    70       91    42    13   24    44    89       2    10      12    46      14    41    23     72     76
 INST:     116    70       91    42    13   24    44    89       2    10      12    46      14    41    23     72     76
 (NUMBER REPORTING PER CATEGORY)

 **    NUMBER OF INSTALLATIONS WHICH:                                                               *** TYPE OF BILLING ***
         PROVIDE: BASIC,    55:   FORTRAN,     102:      USE:   INTERACTIVE COMPUTING,        36
                  APL,      21:   GRAPHICS,      6:             REMCTE COMPUTING SERVICES,    63          1:    81
                  COBOL,    91:   RPG,          86       %FTE   0-24   25-49  50-74  75-99                2:    14
                  PL/I,     24:   OTHER,        36       USER                                             3:     3
                  PLANIT,    1:   PASCAL,        3       SERV   127      6      9     30
                  LOGO,      1:   TUTOR,         3                                                     *** FACILITIES MGT ***
                  COURSEWRITER,.....             2       INSTL: 127      6      9     30                        0
                                                         INST:  127      6      9     30
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                    CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
     GROUP (PUBLIC: ASSOCIATE:2500-9999  )
          TOTAL NUMBER OF INSTITUTIONS             =  332      TOTAL NUMBER OF INSTALLATIONS REPORTED     =  166
          TOTAL NUMBER OF INSTITUTIONS REPORTING =  170      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =  161

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****        *********** OPERATING  1976-77 *********************************************
      HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  CTHER  ///////// OFF-CAMPUS SERVICES /////////    TOTAL
                                                 LEASE    SVCS    OPER  CO-CP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

        5063     221         765        12839    7947     410    3025             110       213            26     30619

INSTL:    76      33          46          136     124      56     118               6         9             2       147
INST:     76      33          46          134     123      55     118               6         7             2       144
 (NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 *****************
      1974-75  1975-76   1977-78        INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                              CO-CP/NCN-PROF   COL/UNIV  COMMERCIAL

        18335    23676     31373      27103    1793      94              179          0          8     750   29927

INSTL:    118      131       145        145      19      12                2          0          1      21     148
INST:     118      130       144        143      19      12                2          0          1      21     145
 (NUMBER REPORTING PER CATEGORY)

 ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS               ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART       MGMT   CLRK  ANA- SYS   APPL  OPER-   DOCTORATE       MASTERS      BACHELORS   UNDER  ASSOC  H-S
       TIME  TIME                    LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD    DEG   DIPL
       1043   313        183    159   85    60   234   384       0     6      18    90      49   169   128    290   510

 INSTL: 135    97        126     91   61    47    93   123       0     6      16    65      34    76    40    111   115
 INST:  135    95        126     91   61    47    93   122       0     6      16    65      34    76    40    111   115
 (NUMBER REPORTING PER CATEGORY)

 **    NUMBER OF INSTALLATICNS WHICH:                                                            ***  TYPE OF BILLING  ***
          PROVIDE: BASIC,     85:  FORTRAN,     126:     USE:   INTERACTIVE CCMPUTING,        64
                   APL,       26:  GRAPHICS,     19:            REMOTE COMPUTING SERVICES,    43          1:   99
                   COBOL,    131:  RPG,         114      %FTE   0-24  25-49  50-74  75-99                 2:    9
                   PL/I,      39:  OTHER,        68      USER                                             3:    2
                   PLANIT,     0:  PASCAL,        0      SERV     96      6     16     48
                   LOGO,       0:  TUTOR,         5                                                 ***  FACILITIES MGT ***
                   COURSEWRITER,.....            17      INSTL:   96      6     16     48                      1
                                                         INST:    95      6     15     48
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 INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                    CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCF FOUNDATION
     GROUP (PUBLIC: ASSOCIATE:10000-19999)
          TOTAL NUMBER OF INSTITUTIONS             =   82      TOTAL NUMBER OF INSTALLATIONS REPORTED     =   38
          TOTAL NUMBER OF INSTITUTIONS REPORTING =   39      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   38

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****        *********** OPERATING  1976-77 *********************************************
      HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  OTHER  ///////// OFF-CAMPUS SERVICES /////////    TOTAL
                                                 LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

        1491      95         134         6376    3279     232    1941             156         1             0     13705

INSTL:    16       8          14           32      28      15      28               1         1             0        33
INST:     16       8          14           32      28      15      28               1         1             0        33
 (NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 *****************
      1974-75  1975-76   1977-78        INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   CTHER   TOTAL
                        PROJECTED                              CO-OP/NON-PROF   COL/UNIV  COMMERCIAL

         9191    11311     13961       9472    1797     120               79          0          0     551   12019

INSTL:     31       31        33         29       5       2                1          0          0       5      30
INST:      31       31        33         29       5       2                1          0          0       5      30
 (NUMBER REPORTING PER CATEGORY)

 ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS               ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLF) *************
       FULL  PART       MGMT   CLRK  ANA- SYS   APPL  OPER-   DOCTORATE       MASTERS      BACHELORS   UNDER  ASSOC  H-S
       TIME  TIME                    LYST PRGMR PRGMR ATORS  COM-SC OTHER  CCM-SC OTHER  COM-SC OTHER  GRAD    DEG   DIPL
        404   133         89     71   55    17    81   138       6     3       6    34       9    71    31     88   159

 INSTL:  32    27         32     26   23    15    25    33       1     3       4    16       8    25    15     30    25
 INST:   32    27         32     26   23    15    25    33       1     3       4    16       8    25    15     30    25
 (NUMBER REPORTING PER CATEGORY)

 **    NUMRER OF INSTALLATIONS WHICH:                                                            ***  TYPE OF BILLING  ***
          PROVIDE: BASIC,     25:  FORTRAN,      32:     USE:   INTERACTIVE COMPUTING,        15
                   APL,        8:  GRAPHICS,      6:            REMOTE COMPUTING SERVICES,     8          1:   24
                   COBOL,     32:  RPG,          22      %FTE   0-24  25-49  50-74  75-99                 2:    3
                   PL/I,      11:  OTHER,        19      USER                                             3:    0
                   PLANIT,     0:  PASCAL,        2      SERV     26      2      0     10
                   LOGO,       0:  TUTOR,         0                                                 ***  FACILITIES MGT ***
                   COURSEWRITER,.....             2      INSTL:   26      2      0     10                      1
                                                         INST:    26      2      0     10
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INVENTORY CF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATICN FOR 1976-77
                  CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSCURI-ROLLA
                           UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
     GROUP (PUBLIC: ASSOCIATS:ABOVE 20000)
          TOTAL NUMBER OF INSTITUTIONS              =   23     TOTAL NUMBER OF INSTALLATIONS REPORTED     =   18
          TOTAL NUMBER OF INSTITUTIONS REPORTING =   17     TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   16

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 ***************************************************
      HDWARE SFTWARE BLDGS & FURN       STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////     TOTAL
                                                LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

        1768     123          16         5091    3375     291    1993             0          0            0     12657

INSTL:    12       9           6           17      15      10      14             0          0            0        17
INST:     11       8           6           15      14      10      14             0          0            0        15
(NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 *****************
      1974-75  1975-76   1977-78      INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                            CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

         9591    11427     13213     11357     371      66               0       1062           0       0   12856

INSTL:     16       16        17        17       2       2               0          1           0       0      17
INST:      15       15        15        15       2       1               0          1           0       0      15
(NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART      MGMT  CLRK  ANA-  SYS   APPL  OPER-   DOCTORATE        MASTERS       BACHELORS  UNDER  ASSOC  H-S
       TIME  TIME                  LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER   GRAD    DEG  DIPL
        345    62        46    44    37    24    92   122       0     1       1    13      11    35     60     56   100

INSTL:   17    14        16    16    12    12    14    16       0     1       1     8       7     9      9     13    10
INST:    15    13        14    14    12    12    14    15       0     1       1     8       7     9      8     13    10
(NUMBER REPORTING PER CATEGORY)

**   NUMBER OF INSTALLATICNS WHICH:                                                          ***  TYPE OF BILLING  ***
        PROVIDE: BASIC,      13:   FORTRAN,       16:      USE:   INTERACTIVE COMPUTING,          9
                 APL,         8:   GRAPHICS,       6:             REMOTE COMPUTING SERVICES,      7         1:    10
                 COBOL,      16:   PPG,           13      %FTE   0-24  25-49  50-74  75-99                  2:     1
                 PL/I,       10:   OTHER,          7      USER                                              3:     0
                 PLANIT,      1:   PASCAL,         1      SERV     14      3      0      1
                 LOGO,        0:   TUTOR,          0                                                 ***  FACILITIES MGT ***
                 COURSEWRITER,......               3      INSTL:   14      3      0      1                      0
                                                          INST:    12      3      0      1
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INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATICN FOR 1976-77
                  CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                           UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
     GROUP (PUBLIC: BACHELCRS:BELOW 500  )
          TOTAL NUMBER OF INSTITUTIONS              =    4     TOTAL NUMBER OF INSTALLATIONS REPORTED     =    0
          TOTAL NUMBER OF INSTITUTIONS REPORTING =    2     TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =    0

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 ***************************************************
      HDWARE SFTWARE BLDGS & FURN       STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////     TOTAL
                                                LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

           0       0           0            0       0       0       0             0          0            0         0

INSTL:     0       0           0            0       0       0       0             0          0            0         0
INST:      0       0           0            0       0       0       0             0          0            0         0
(NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 *****************
      1974-75  1975-76   1977-78      INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                            CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

            0        0         0         0       0       0               0          0           0       0       0

INSTL:      0        0         0         0       0       0               0          0           0       0       0
INST:       0        0         0         0       0       0               0          0           0       0       0
(NUMBER REPORTING PER CATEGORY)

** NUMBER CF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART      MGMT  CLRK  ANA-  SYS   APPL  OPER-   DOCTORATE        MASTERS       BACHELORS  UNDER  ASSOC  H-S
       TIME  TIME                  LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER   GRAD    DEG  DIPL
          0     0         0     0     0     0     0     0       0     0       0     0       0     0      0      0     0

INSTL:    0     0         0     0     0     0     0     0       0     0       0     0       0     0      0      0     0
INST:     0     0         0     0     0     0     0     0       0     0       0     0       0     0      0      0     0
(NUMBER REPORTING PER CATEGORY)

**   NUMBER OF INSTALLATIONS WHICH:                                                          ***  TYPE OF BILLING  ***
        PROVIDE: BASIC,       0:   FORTRAN,        0:      USE:   INTERACTIVE COMPUTING,          0
                 APL,         0:   GRAPHICS,       0:             REMOTE COMPUTING SERVICES,      0         1:     0
                 COBOL,       0:   RPG,            0      %FTE   0-24  25-49  50-74  75-99                  2:     0
                 PL/I,        0:   OTHER,          0      USER                                              3:     0
                 PLANIT,      0:   PASCAL,         0      SERV      0      0      0      0
                 LOGO,        0:   TUTOR,          0                                                 ***  FACILITIES MGT ***
                 COURSEWRITER,......               0      INSTL:    0      0      0      0                      0
                                                          INST:     0      0      0      0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                        UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
    GROUP (PUBLIC: BACHELORS:500-2499    )
        TOTAL NUMBER OF INSTITUTIONS             =  55     TOTAL NUMBER OF INSTALLATIONS REPORTED     =  35
        TOTAL NUMBER OF INSTITUTIONS REPORTING =  34     TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =  32

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 ************************************************
      HDWARE SFTWARE BLDGS & FURN       STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////    TOTAL
                                               LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

        851     40          238        1228   1054      42     333               6      102            0       3894

INSTL:   20      8           17          28     27       6      25               1        4            0         31
INST:    20      7           16          27     27       6      25               1        4            0         30
(NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
      1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                             CO-OP/NON-PROF   COL/UNIV  COMMERCIAL

        1513     2213      3430        2607    167     940              29          1           0      2    3746

INSTL:    24       27        31          28      2       7               2          1           0      1      30
INST:     23       27        30          28      2       6               2          1           0      1      29
(NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS            ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART       MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE        MASTERS       BACHELORS  UNDER  ASSOC  H-S
       TIME  TIME                   LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD    DEG   DIPL
        108   87         28    28     9     9    24    41      1     8       4    11       8    24    25     14    58

INSTL:   30   22         22    15     8     8    17    25      1     7       4     9       6    17    12      8    20
INST:    29   21         22    15     8     8    17    25      1     7       4     9       6    17    12      8    20
(NUMBER REPORTING PER CATEGORY)

**   NUMBER OF INSTALLATIONS WHICH:                                                              *** TYPE OF BILLING ***
        PROVIDE: BASIC,     24:  FORTRAN,      31:     USE:  INTERACTIVE COMPUTING,        17
                 APL,        8:  GRAPHICS,      7:           REMOTE COMPUTING SERVICES,    23           1:    22
                 COBOL,     29:  RPG,          19      %FTE  0-24  25-49  50-74  75-99                  2:     3
                 PL/I,      18:  OTHER,         9      USER                                             3:     0
                 PLANIT,     0:  PASCAL,        3      SERV    19      1      6      9
                 LOGO,       0:  TUTOR,         1                                                *** FACILITIES MGT ***
                 COURSEWRITER......             3      INSTL:  19      1      6      9                     0
                                                       INST:   17      1      6      9
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                        UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
    GROUP (PUBLIC: BACHELORS:2500-9999  )
        TOTAL NUMBER OF INSTITUTIONS             =  36     TOTAL NUMBER OF INSTALLATIONS REPORTED     =  26
        TOTAL NUMBER OF INSTITUTIONS REPORTING =  24     TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =  24

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 ************************************************
      HDWARE SFTWARE BLDGS & FURN       STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////    TOTAL
                                               LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

        536     10           22        3021   2665     119     839              10       86            0       7308

INSTL:   15      3            7          23     22       7      24               1        4            0         25
INST:    15      3            6          22     21       6      24               1        4            0         24
(NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
      1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                             CO-OP/NON-PROF   COL/UNIV  COMMERCIAL

        4578     5724      7254        6969    116      88               0         23           0     64    7260

INSTL:    22       22        26          25      1       3               0          1           0      1      25
INST:     20       21        24          24      1       3               0          1           0      1      24
(NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS            ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART       MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE        MASTERS       BACHELORS  UNDER  ASSOC  H-S
       TIME  TIME                   LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD    DEG   DIPL
        223   52         40    28    33    20    43    82      1     6      11    12      17    48    34     22    88

INSTL:   24   19         23    16    12    12    16    21      1     6       8     8       7    17    15     11    20
INST:    23   18         22    16    12    12    16    21      1     6       8     8       7    17    15     11    20
(NUMBER REPORTING PER CATEGORY)

**   NUMBER OF INSTALLATIONS WHICH:                                                              *** TYPE OF BILLING ***
        PROVIDE: BASIC,     20:  FORTRAN,      23:     USE:  INTERACTIVE COMPUTING,        17
                 APL,        9:  GRAPHICS,      8:           REMOTE COMPUTING SERVICES,    17           1:    14
                 COBOL,     22:  RPG,          15      %FTE  0-24  25-49  50-74  75-99                  2:     3
                 PL/I,      17:  OTHER,         6      USER                                             3:     1
                 PLANIT,     0:  PASCAL,        2      SERV    11      3      4      8
                 LOGO,       0:  TUTOR,         2                                                *** FACILITIES MGT ***
                 COURSEWRITER......             4      INSTL:  11      3      4      8                     0
                                                       INST:   10      3      3      8
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                   CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                             UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
    GROUP (PUBLIC: MASTERS:  BELOW 500  )
         TOTAL NUMBER OF INSTITUTIONS              =  11     TOTAL NUMBER OF INSTALLATIONS REPORTED      =    4
         TOTAL NUMBER OF INSTITUTIONS REPORTING =   6     TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =    4

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****         *********** OPERATING  1976-77 **********************************************
      HDWARE SFTWARE BLDGS & FURN         STAFF  HDWARE  SFTWARE  OTHER  ///////// OFF-CAMPUS SERVICES ////////     TOTAL
                                                 LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL    1976-77

         27       1          18            55     35       0      22                 0         0             0       158

INSTL:    2       1           2             2      1       0       2                 0         0             0         2
INST:     2       1           2             2      1       0       2                 0         0             0         2
 (NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
      1974-75  1975-76   1977-78        INST    STATE    FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                                CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

        60        55       380          189       0        1           0           0             0      1     191

INSTL:   1         1         2            2       0        1           0           0             0      1       2
INST:    1         1         2            2       0        1           0           0             0      1       2
 (NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS               ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
      FULL  PART     MGMT  CLRK  ANA- SYS   APPL  CPER-   DOCTORATE        MASTERS       BACHELORS  UNDER   ASSOC   H-S
      TIME  TIME                 LYST PRGMR PRGMR ATORS  COM-SC OTHER   COM-SC OTHER   COM-SC OTHER  GRAD    DEG    DIPL
        2     5        2     1     1    0     1     0       0      0       0     1        0     6      0       0       0

INSTL:  2     2        2     1     1    0     1     0       0      0       0     1        0     2      0       0       0
INST:   2     2        2     1     1    0     1     0       0      0       0     1        0     2      0       0       0
 (NUMBER REPORTING PER CATEGORY)
                                                                                              ***  TYPE OF BILLING  ***
**   NUMBER OF INSTALLATIONS WHICH:
       PROVIDE: BASIC,     2:   FORTRAN,      2:      USE:   INTERACTIVE COMPUTING,       2
                APL,       1:   GRAPHICS,     2:             REMOTE COMPUTING SERVICES,   2            1:    1
                COBOL,     1:   RPG,          0       %FTE   0-24  25-49  50-74  75-99                2:    1
                PL/I,      1:   OTHER,        2       USER                                            3:    0
                PLANIT,    0:   PASCAL,       0       SERV     2      0      1      1
                LOGO,      0:   TUTOR,        1                                                 ***  FACILITIES MGT ***
                COURSEWRITER......            0       INSTL:   2      0      1      1                     1
                                                      INST:    2      0      1      1


INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                   CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                             UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
    GROUP (PUBLIC: MASTERS:  500-2499   )
         TOTAL NUMBER OF INSTITUTIONS              =  39     TOTAL NUMBER OF INSTALLATIONS REPORTED      =  23
         TOTAL NUMBER OF INSTITUTIONS REPORTING =  22     TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =  21

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****         *********** OPERATING  1976-77 **********************************************
      HDWARE SFTWARE BLDGS & FURN         STAFF  HDWARE  SFTWARE  OTHER  ///////// OFF-CAMPUS SERVICES ////////     TOTAL
                                                 LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL    1976-77

        901      46         135           973    862      36     328                 0        59             0      3340

INSTL:    6       5           8            15     15       6      15                 0         2             0        15
INST:     6       5           8            14     14       6      14                 0         2             0        14
 (NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
      1974-75  1975-76   1977-78        INST    STATE    FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                                CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

       1207     1949      2785         2593       0      242           2           0             0     44    2881

INSTL:   14       15        16           16       0        3           1           0             0      6      16
INST:    12       14        15           15       0        3           1           0             0      6      15
 (NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS               ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
      FULL  PART     MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE        MASTERS       BACHELORS  UNDER   ASSOC   H-S
      TIME  TIME                 LYST PRGMR PRGMR ATORS  COM-SC OTHER   COM-SC OTHER   COM-SC OTHER  GRAD    DEG    DIPL
       73    46       15     9     5    1    20    41       1      3       4    10        4    17     11      11      24

INSTL: 14     9       12     7     4    1    10    11       1      2       4     8        3     9      8       7       9
INST:  14     9       12     7     4    1    10    10       1      2       4     8        3     9      8       7       9
 (NUMBER REPORTING PER CATEGORY)
                                                                                              ***  TYPE OF BILLING  ***
**   NUMBER OF INSTALLATIONS WHICH:
       PROVIDE: BASIC,    10:   FORTRAN,     13:      USE:   INTERACTIVE COMPUTING,       5
                APL,       5:   GRAPHICS,     3:             REMOTE COMPUTING SERVICES,  10            1:   11
                COBOL,    10:   RPG,          8       %FTE   0-24  25-49  50-74  75-99                2:    1
                PL/I,      4:   OTHER,        7       USER                                            3:    3
                PLANIT,    0:   PASCAL,       0       SERV    17      0      1      5
                LOGO,      0:   TUTOR,        0                                                 ***  FACILITIES MGT ***
                COURSEWRITER......            2       INSTL:  17      0      1      5                     0
                                                      INST:   17      0      1      4
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                         UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
     GROUP (PUBLIC; MASTERS;  2500-9999  )
         TOTAL NUMBER OF INSTITUTIONS            =  172      TOTAL NUMBER OF INSTALLATIONS REPORTED      =  110
         TOTAL NUMBER OF INSTITUTIONS REPORTING =  101      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   98

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****      ************ OPERATING  1976-77 ****************************************************
      HDWARE SFTWARE BLDGS & FURN       STAFF  HDWARE  SFTWARE  OTHER  ///////// OFF-CAMPUS SERVICES /////////     TOTAL
                                                LEASE    SVCS   OPER   CO-OP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

        4693    212          490       12737    7420      394   3428                9       351           33     29767

INSTL:    60     25           37         101      86       37     91                1        11            2       104
INST:     56     25           35          92      84       37     84                1        10            2        94
(NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *  ********** SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 *****************
      1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                             CO-CP/NON-PROF   COL/UNIV   COMMERCIAL

        19675    22830     29331      26348    1269     131               41          1           16     548   28354

INSTL:     90       97       102        100      10      13                4          1            2      20     103
INST:      84       88        93         90      10      11                4          1            2      20      93
(NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART     MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE        MASTERS      BACHFLORS  UNDER  ASSOC  H-S
       TIME  TIME                 LYST PRGMR PRGMR ATORS  COM-SC OTHER   COM-SC OTHER   COM-SC OTHER  GRAD   DEG   DIPL
        993   504      183   172   142   61   195   415      14    32       26    78       64   228   256    51   448

INSTL:   98    72       97    70    64   52    74    95       6    26       17    56       31    74    66    37    83
INST:    95    69       93    69    62   52    71    92       6    26       17    55       31    71    64    37    80
(NUMBER REPORTING PER CATEGORY)

**    NUMBER OF INSTALLATIONS WHICH:                                                          ***  TYPE OF BILLING  ***
          PROVIDE: BASIC,      79:   FORTRAN,      91:      USE:   INTERACTIVE COMPUTING,       55
                   APL,        35:   GRAPHICS,     26:             REMOTE COMPUTING SERVICES,   55          1:    72
                   COBOL,      94:   RPG,          67      %FTE   0-24  25-49  50-74  75-99                 2:    14
                   PL/I,       48:   OTHER,        44      USER                                              3:     3
                   PLANIT,      3:   PASCAL,       13      SERV     70      3      9     28
                   LOGO,        2:   TUTOR,         6                                                  ***  FACILITIES MGT ***
                   COURSEWRITER......              10      INSTL:   70      3      9     28                        0
                                                           INST:    64      3      9     28
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                         UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
     GROUP (PUBLIC; MASTERS;  10000-19999)
         TOTAL NUMBER OF INSTITUTIONS            =   37      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   38
         TOTAL NUMBER OF INSTITUTIONS REPORTING =   29      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   27

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****      ************ OPERATING  1976-77 ****************************************************
      HDWARE SFTWARE BLDGS & FURN       STAFF  HDWARE  SFTWARE  OTHER  ///////// OFF-CAMPUS SERVICES /////////     TOTAL
                                                LEASE    SVCS   OPER   CO-CP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

        1773    160          114        7348    4431      409   2577               43       110            0     16965

INSTL:    22     13           18          32      30       14     29                2         2            0        35
INST:     18     12           17          27      26       14     24                2         2            0        28
(NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *  ********** SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 *****************
      1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                             CO-CP/NON-PROF   COL/UNIV   COMMERCIAL

        11108    14260     18009      15123    1320      53               12         20            0      70   16598

INSTL:     28       29        33         35       4       2                1          1            0       9      35
INST:      25       25        27         28       4       1                1          1            0       9      28
(NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART     MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE        MASTERS      BACHELORS  UNDER  ASSOC  H-S
       TIME  TIME                 LYST PRGMR PRGMR ATORS  COM-SC OTHER   COM-SC OTHER   COM-SC OTHER  GRAD   DEG   DIPL
        612   194      101    91    55   36   130   221       4    24        9    46       50   134   115    33   229

INSTL:   35    29       33    33    24   21    30    31       2     9        5    22       15    28    20    16    27
INST:    27    24       28    27    21   19    26    27       2     9        5    19       15    24    18    15    25
(NUMBER REPORTING PER CATEGORY)

**    NUMBER OF INSTALLATIONS WHICH:                                                          ***  TYPE OF BILLING  ***
          PROVIDE: BASIC,      29:   FORTRAN,      33:      USE:   INTERACTIVE COMPUTING,       24
                   APL,        16:   GRAPHICS,     14:             REMOTE COMPUTING SERVICES,   24          1:    22
                   COBOL,      31:   RPG,          22      %FTE   0-24  25-49  50-74  75-99                 2:     T
                   PL/I,       20:   OTHER,        15      USER                                              3:     0
                   PLANIT,      1:   PASCAL,        9      SERV     23      3      3      9
                   LOGO,        2:   TUTOR,         2                                                  ***  FACILITIES MGT ***
                   COURSEWRITER......               7      INSTL:   23      3      3      9                        1
                                                           INST:    20      2      3      8
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATIUN FOR 1976-77
                CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA                    PAGE VI-15
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
     GROUP (PUBLIC; MASTERS;  ABOVE 20000)
          TOTAL NUMBER OF INSTITUTIONS              =   9      TOTAL NUMBER OF INSTALLATICNS REPORTED     =   4
          TOTAL NUMBER OF INSTITUTICNS REPORTING =     3      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   3

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

        **** CAPITAL  1976-77  ****        *********** OPERATING  1976-77 ***********************************************
        HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////    TOTAL
                                                   LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV  COMMERCIAL   1976-77

         136      0          6          1407    560        0     323              0         0            0      2432

INSTL:     3      0          1             4      3        0       4              0         0            0         4
INST:      3      0          1             3      3        0       3              0         0            0         3
(NUMBER REPORTING PER CATEGORY)

        * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
        1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                          PROJECTED                             CO-CP/NCN-PROF   COL/UNIV   COMMERCIAL

           1619     1861      2189       1582      0       4             0           0           0      40    1626

INSTL:        4        4         4          3      0       1             0           0           0       1       4
INST:         3        3         3          2      0       1             0           0           0       1       3
(NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS               ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART      MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE        MASTERS       BACHELORS  UNDER  ASSOC  H-S
       TIME  TIME                  LYST PRGMR PRGMR ATORS  COM-SC OTHER  CCM-SC OTHER  COM-SC OTHER  GRAD   DEG   DIPL
         77    36         6     9     8     6    15    43      0     1       1     4       6    14     11      7    25

INSTL:    4     4         3     3     3     4     3     4      0     1       1     3       1     4      4      2     3
INST:     3     3         3     3     2     3     3     3      0     1       1     3       1     3      3      2     3
(NUMBER REPORTING PER CATEGORY)
                                                                                              ***  TYPE OF BILLING  ***
**    NUMBER OF INSTALLATIONS WHICH:
         PROVIDE: BASIC,      3:    FORTRAN,       4:      USE:   INTERACTIVE COMPUTING,       2
                  APL,        2:    GRAPHICS,      1:             REMOTF COMPUTING SFRVICES,   3            1:    4
                  COBOL,      3:    RPG,           1       %FTE   0-24  25-49  50-74  75-99                 2:    0
                  PL/I,       1:    OTHER,         0       USER                                             3:    0
                  PLANIT,     0:    PASCAL,        0       SERV     2      1      1      0
                  LOGO,       0:    TUTOR,         0                                                 ***  FACILITIES MGT ***
                  COURSEWRITER,......              0       INSTL:   2      1      1      0                      0
                                                           INST:    2      1      1      0
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INVENTORY OF COMPUTERS, APPLICATIONS CF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
     GROUP (PUBLIC; DOCTORATE;500-2499    )
          TOTAL NUMBER OF INSTITUTIONS              =  28      TOTAL NUMBER OF INSTALLATICNS REPORTEC     =  23
          TOTAL NUMBER OF INSTITUTICNS REPORTING =    18      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =  18

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS CF DOLLARS   **

        **** CAPITAL  1976-77  ****        *********** OPERATING  1976-77 ***********************************************
        HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  CTHER  //////// OFF-CAMPUS SERVICES ////////    TOTAL
                                                   LEASE    SVCS    OPER  CO-CP/NCN-PROF  COL/UNIV  COMMERCIAL   1976-77

        3391    131         64          7525   2646      253    1604            380       186            0     16180

INSTL:    14      7         11            22     16       11      19              1         2            0        22
INST:     12      7          9            17     14       10      15              1         2            0        17
(NUMBER REPORTING PER CATEGORY)

        * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
        1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SFRVICE INCOME /////   OTHER   TOTAL
                          PROJECTED                             CO-CP/NON-PROF   COL/UNIV   COMMERCIAL

          10948    12630     17994      12524   2595     248             0           0           0     242   15609

INSTL:       19       21        22         22      3       5             0           0           0       7      22
INST:        16       17        17         17      3       5             0           0           0       6      17
(NUMBER REPORTING PER CATEGCRY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS               ** HIGHEST LEVEL OF DEGREE (NUMBFR OF PEOPLE) *************
       FULL  PART      MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE        MASTERS       BACHELORS  UNDER  ASSOC  H-S
       TIME  TIME                  LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHFR  COM-SC OTHER  GRAD   DEG   DIPL
        618    35        74    88    74    26   132   240      0    13       7    42      24   133     56     32   265

INSTL:   22     9        21    17    19    13    19    21      0     7       4    16      12    20     13     13    20
INST:    17     7        17    15    16    11    16    17      0     7       4    15      11    16     12     11    15
(NUMBER REPORTING PER CATEGORY)
                                                                                              ***  TYPE OF BILLING  ***
**    NUMBER OF INSTALLATIONS WHICH:
         PROVIDE: BASIC,     14:    FORTRAN,      21:      USE:   INTERACTIVE COMPUTING,      11
                  APL,        6:    GRAPHICS,      7:             REMOTE COMPUTING SERVICES,   9            1:    7
                  COBOL,     20:    RPG,           6       %FTE   0-24  25-49  50-74  75-99                 2:    7
                  PL/I,       7:    OTHER,        13       USER                                             3:    3
                  PLANIT,     0:    PASCAL,        3       SERV    19      0      2      2
                  LOGO,       0:    TUTOR,         1                                                 ***  FACILITIES MGT ***
                  COURSEWRITER,......              2       INSTL:  19      0      2      2                      1
                                                           INST:   16      0      2      2
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                  CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                           UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
    GROUP (PUBLIC: DOCTORATE:2500-9999  )
         TOTAL NUMBER OF INSTITUTIONS               =   43      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   45
         TOTAL NUMBER OF INSTITUTIONS REPORTING =   34      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   32

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS CF DOLLARS    **

       **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 ************************************************
       HDWARE SFTWARE BLDGS & FURN       STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////     TOTAL
                                                 LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV  COMMERCIAL   1976-77

         2845     234          285       10808    6278     821    3948            417      1569           0     27205

INSTL:     26      20           27          37      35      19      37              2         1           0        39
INST:      22      19           24          32      32      19      33              2         1           0        33
 (NUMBER REPORTING PER CATEGORY)

       * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
       1974-75  1975-76   1977-78      INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                          PROJECTED                           CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

         18868 · 23167     28619      20492    2642    1409               0          0            0    1811   26354

INSTL:      35      36        39         39      13      18               0          0            0      23      39
INST:       30      31        33         33      13      18               0          0            0      21      33
 (NUMBER REPORTING PER CATEGORY)

 ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS           ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
        FULL  PART      MGMT  CLRK  ANA-  SYS   APPL  OPER-   DOCTORATE      MASTERS .    BACHELORS  UNDER  ASSOC  H-S
        TIME  TIME                  LYST PRGMR PRGMR ATORS  COM-SC OTHER  CCM-SC OTHER  COM-SC OTHER  GRAD   DEG   DIPL
         859   328       124   123   124    60   172   313       4    24      19    81      49   237   124     35   314

 INSTL:   36    35        36    32    29    31    31    37       4    15      10    31      17    33    26     14    30
 INST:    33    31        33    31    27    28    27    33       4    15      10    29      17    29    24     13    27
 (NUMBER REPORTING PER CATEGORY)

 **    NUMBER OF INSTALLATIONS WHICH:                                                              ***  TYPE OF BILLING  ***
        PROVIDE: BASIC,     28:   FORTRAN,      36:       USE:   INTERACTIVE COMPUTING,        22
                 APL,       15:   GRAPHICS,     20:              REMOTE COMPUTING SERVICES,    11            1:    16
                 COBOL,     33:   RPG,          20        %FTE   0-24  25-49  50-74  75-99                   2:    13
                 PL/I,      24:   OTHER,        20        USER                                               3:     6
                 PLANIT,     0:   PASCAL,       12        SERV     29      4      6      6
                 LOGO,       0:   TUTOR,         1                                                    ***  FACILITIES MGT ***
                 COURSEWRITER,.....              4        INSTL:   29      4      6      6                       0
                                                          INST:    25      4      4      5
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                  CONDUCTED BY THF COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                           UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATICN
    GROUP (PUBLIC: DOCTORATE:10000-19999)
         TOTAL NUMBER OF INSTITUTIONS               =   63      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   76
         TOTAL NUMBER OF INSTITUTICNS REPORTING =   47      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   40

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS    **

       **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 ************************************************
       HDWARE SFTWARE BLDGS & FURN       STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////     TOTAL
                                                 LEASE    SVCS    OPER  CO-CP/NON-PROF  COL/UNIV  COMMERCIAL   1976-77

        10440 .   591          423       22789   10682     531    8299            379       231           0     54365

INSTL:     59      33           40          66      55      37      60              2         2           0        71
INST:      39      28           32          44      42      33      41              2         2           0        44
 (NUMBER REPORTING PER CATEGORY)

       * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS CF DOLLARS) 1976-77 ****************
       1974-75  1975-76   1977-78      INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   CTHER   TOTAL
                          PRCJECTED                           CO-CP/NON-PROF   COL/UNIV   COMMERCIAL

         37306   42951     58055      43035    5104    3589             500       1104          258    1501   55091

INSTL:      58      60        69         59      25      33               4          4            5      24      71
INST:       43      43        44         43      22      23               4          4            5      21      44
 (NUMBER REPORTING PER CATEGORY)

 ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS           ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
        FULL  PART      MGMT  CLRK  ANA-  SYS   APPL  OPER-   DOCTORATE      MASTERS      BACHELORS  UNDER  ASSOC  H-S
        TIME  TIME                  LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHFR  COM-SC OTHER  GRAD   DEG   DIPL
        1510   732       216   223   162   131   373   634      12    55      53   134      88   398   417    100   569

 INSTL:   60    55        58    52    39    49    53    53      10    28      22    48      31    53    46     31    47
 INST:    44    39        45    43    34    38    41    41      10    21      20    40      26    41    35     28    38
 (NUMBER REPORTING PER CATEGORY)

 **    NUMBER OF INSTALLATICNS WHICH:                                                              ***  TYPE OF BILLING  ***
        PROVIDE: BASIC,     54:   FORTRAN,      63:       USE:   INTERACTIVE COMPUTING,        38
                 APL,       22:   GRAPHICS,     34:              REMOTE CCMPUTING SERVIC:S,    29            1:    32
                 COBOL,     47:   RPG,          27        %FTE   0-24  25-49  50-74  75-99                   2:    17
                 PL/I,      29:   OTHER,        43        USER                                               3:    12
                 PLANIT,     3:   PASCAL,       20        SERV     51     11      6      8
                 LOGO,       2:   TUTOR,         0                                                    ***  FACILITIFS MGT ***
                 COURSEWRITER,.....              4        INSTL:   51     11      6      8                       1
                                                          INST:    37      9      6      7
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA                           PAGE VI-17
                         UNDER A GRANT FRGM THE NATIONAL SCIENCE FOUNDATION
   GROUP (PUBLIC: DOCTCRATE:ABOVE 20000)
         TOTAL NUMBER OF INSTITUTIONS               =   71      TOTAL NUMBER OF INSTALLATIONS REPORTED      =  203
         TOTAL NUMBER OF INSTITUTIONS REPORTING =   52      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   48

**   ESTIMATED TOTAL EXP2NDITURES IN THOUSANDS OF DOLLARS   **

       **** CAPITAL  1976-77  ****      *********** OPERATING  1976-77 **************************************************
       HDWARE SFTWARE BLDGS & FURN      STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////     TOTAL
                                               ` LEASE   SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

        28605     987        1651      71422  35948    1367   26650          1325       816            0    168771

INSTL:    144      50          70        154    106      61     149             2         3            0       179
INST:      45      36          35         49     48      40      49             2         3            0        49
(NUMBER REPORTING PER CATEGORY)

       * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
       1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                         PROJECTED                             CO-CP/NON-PROF   COL/UNIV   COMMERCIAL

        136444   150530    169702    125930    5774   16119            386         2912          310  13652  165083

INSTL:    155      161       174       163      43      89              8            6            6     51     181
INST:      48       49        50        50      27      33              8            6            6     30      50
(NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART       MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE       MASTERS      BACHELORS  UNDER  ASSOC  H-S
       TIME  TIME                   LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD   DEG   DIPL
       4998  1729        686   82:  624   502   945  1636      44   185     227   460     301  1215  1054    305  1854

INSTL: 136   142         119   10:   83   116   112   108      24    72      75   105      78   117   105     71    87
INST:   50    45          49    49   47    47    4*    49      23    34      39    48      37    47    47     42    48
(NUMBER REPORTING PER CATEGORY)

**    NUMBER OF INSTALLATIONS WHICH:                                                              ***  TYPE OF BILLING  ***
        PROVIDE: BASIC,     95:   FORTRAN,     149:     USE:   INTERACTIVE COMPUTING,       107
                 APL,       38:   GRAPHICS,     76:            REMOTE COMPUTING SERVICES,    66          1:    75
                 COBOL,     90:   RPG,          49      %FTF   0-24  25-49  50-74  75-99                 2:    41
                 PL/I,      63:   OTHER,        96      USER                                             3:    35
                 PLANIT,     3:   PASCAL,       37      SERV    141     20     18     24
                 LOGO,       3:   TUTOR,         9                                                  ***  FACILITIES MGT ***
                 COURSEWRITER,.....             14      INSTL:  141     20     18     24                       3
                                                        INST:    45     17     13     16
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INVENTORY OF COMPUTERS, APPLICATICNS CF COMPUTERS, ANC INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                         UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
   GROUP (PRIVATE:ASSOCIATE:BELCW 500  )
         TOTAL NUMBER OF INSTITUTIONS               =  161      TOTAL NUMBER OF INSTALLATICNS REPORTED      =    9
         TOTAL NUMBER OF INSTITUTICNS REPORTING =  100     |TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =    9

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

       **** CAPITAL  1976-77  ****      *********** OPERATING  1976-77 **************************************************
       HDWARE SFTWARE BLDGS & FURN      STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////     TOTAL
                                                LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

           72       1          46        472    287      13      73             0         0            0       964

INSTL:      2       1           2          7      6       2       5             0         0            0         8
INST:       2       1           2          7      6       2       5             0         0            0         8
(NUMBER REPORTING PER CATEGORY)

       * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
       1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                         PROJECTED                             CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

          774      819       894       837       0      25              0            0            0      0     862

INSTL:      5        5         8         6       0       1              0            0            0      0       7
INST:       5        5         8         6       0       1              0            0            0      0       7
(NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART       MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE       MASTERS      BACHELORS  UNDER  ASSOC  H-S
       TIME  TIME                   LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD   DEG   DIPL
         38    18          9     9    4     1     5    19       0     1       0     4       0     8     7      2    30

INSTL:    3     8          3     1    1     1     3     4       0     1       0     2       0     5     3      2     3
INST:     3     8          3     1    1     1     3     4       0     1       0     2       0     5     3      2     3
(NUMBER REPORTING PER CATEGORY)

**    NUMBER OF INSTALLATIONS WHICH:                                                              ***  TYPE OF BILLING  ***
        PROVIDE: BASIC,      2:   FORTRAN,       3:     USE:   INTERACTIVE COMPUTING,         1
                 APL,        0:   GRAPHICS,      0:            REMOTE COMPUTING SERVICES,     0          1:     5
                 COBOL,      4:   RPG,           6      %FTE   0-24  25-49  50-74  75-99                 2:     0
                 PL/I,       0:   OTHER,         1      USER                                             3:     0
                 PLANIT,     0:   PASCAL,        0      SERV      8      0      1      0
                 LOGO,       0:   TUTOR,         0                                                  ***  FACILITIES MGT ***
                 COURSEWRITER,.....              0      INSTL:    8      0      1      0                       0
                                                        INST:     8      0      1      0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                          UNDER A GRANT FRCM THE NATIONAL SCIENCE FOUNDATION                                 PAGE VI-18
   GROUP (PRIVATE:ASSOCIATE:500-2499   )
        TOTAL NUMBER OF INSTITUTIONS              =   90      TOTAL NUMBER OF INSTALLATICNS REPORTED      =   18
        TOTAL NUMBER CF INSTITUTIONS REPORTING =   48      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   18

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

       **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 ***************************************************
       HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  CTHER  //////// OFF-CAMPUS SERVICES ////////      TOTAL
                                                  LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   CCMMERCIAL   1976-77

           8       5           6           205     107      21      56               0         0           35        443

INSTL:     1       1           2            10       8       4       6               0         0            2         10
INST:      1       1           2            10       8       4       6               0         0            2         10
(NUMBER REPORTING PER CATEGORY)

       * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
       1974-75  1975-76   1977-78      INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                         PROJECTED                             CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

          231      238       429       437       0       0             0           0              0      5      442

INSTL:      9        8         9        10       0       0             0           0              0      1       10
INST:       9        8         9        10       0       0             0           0              0      1       10
(NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS               ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART      MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE        MASTERS      BACHELORS  UNDER  ASSOC  H-S
       TIME  TIME                  LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD   DEG   DIPL
        15    17         4     4     1     1     3     6       0     2       1    24      3    11      0      3    12

INSTL:   7     8         4     4     1     1     3     5       0     1       1     4      2     5      0      3     5
INST:    7     8         4     4     1     1     3     5       0     1       1     4      2     5      0      3     5
(NUMBER REPORTING PER CATEGORY)

**   NUMBER OF INSTALLATIONS WHICH:                                                               ***  TYPE OF BILLING  ***
        PROVIDE: BASIC,      4:   FORTRAN,      5:      USE:   INTERACTIVE COMPUTING,          1
                 APL,        0:   GRAPHICS,     1:             REMOTE COMPUTING SERVICES,      2            1:     7
                 COBOL,      6:   RPG,          6       %FTE   0-24  25-49  50-74  75-99                    2:     1
                 PL/I,       0:   OTHER,        2       USER                                                3:     0
                 PLANIT,     0:   PASCAL,       0       SERV     14      0      2      2
                 LOGO,       0:   TUTOR,        1                                                   ***  FACILITIES MGT ***
                 COURSEWRITER......             0       INSTL:   14      0      2      2                          2
                                                        INST:    14      0      2      2


INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATICN FOR 1976-77
                 CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FCUNDATION
   GROUP (PRIVATF:ASSOCIATE:2500-9999  )
        TOTAL NUMBER OF INSTITUTIONS              =    8      TOTAL NUMBER OF INSTALLATIONS REPORTED      =    1
        TOTAL NUMBER CF INSTITUTIONS REPORTING =    4      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =    1

**   ESTIMATED TOTAL EXPENDITURES IN THCUSANDS CF DOLLARS   **

       **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 ***************************************************
       HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////      TOTAL
                                                  LEASE    SVCS    OPER  CO-CP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

           0       0           0           115      30       2      60               0         0            0        207

INSTL:     0       0           0             1       1       1       1               0         0            0          1
INST:      0       0           0             1       1       1       1               0         0            0          1
(NUMBER REPORTING PER CATEGCRY)

       * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOMF (THOUSANDS OF DOLLARS) 1976-77 ****************
       1974-75  1975-76   1977-78      INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   CTHER   TOTAL
                         PROJECTED                             CO-CP/NON-PROF   COL/UNIV   COMMERCIAL

          152      172       209       207       0       0             0           0              0      0      207

INSTL:      1        1         1         1       0       0             0           0              0      0        1
INST:       1        1         1         1       0       0             0           0              0      0        1
(NUMBER REPORTING PER CATEGORY)

** NUMBER CF PEOPLE *** FULL-TIME EQUIVALENTS .             ** HIGHEST LEVEL OF DEGRFE (NUMBER OF PEOPLE) *************
       FULL  PART      MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE        MASTERS      BACHELORS  UNDER  ASSOC  H-S
       TIME  TIME                  LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD   DEG   DIPL
        10     5         1     1     0     0     4     5       0     0       0     0      0     2      2      0     6

INSTL:   1     1         1     1     0     0     1     1       0     0       0     0 .    0     1      1      0     1
INST:    1     1         1     1     0     0     1     1       0     0       0     0      0     1      1      0     1
(NUMBER REPORTING PER CATEGORY)

**   NUMBER OF INSTALLATIONS WHICH:                                                               ***  TYPE OF BILLING  ***
        PROVIDE: BASIC,      0:   FORTRAN,      1:      USE:   INTERACTIVE COMPUTING,          0
                 APL,        0:   GRAPHICS,     0:             REMOTE COMPUTING SFRVICES,      1            1:     1
                 COBOL,      1:   RPG,          1       %FTE   0-24  25-49  50-74  75-99                    2:     0
                 PL/I,       1:   OTHER,        0       USER                                                3:     0
                 PLANIT,     0:   PASCAL,       0       SERV      0      0      0      1
                 LOGO,       0:   TUTOR,        0                                                   ***  FACILITIES MGT ***
                 COURSEWRITER......             0       INSTL:    0      0      0      1                          0
                                                        INST:     0      0      0      1
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                  CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                            UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
   GROUP (PRIVATE:BACHELORS:BELOW 500  )
         TOTAL NUMBER OF INSTITUTIONS              =  222      TOTAL NUMBEP OF INSTALLATICNS REPORTED      =   30
         TOTAL NUMBER OF INSTITUTIONS REPORTING =  117      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   29

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS    **

       **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 *****************************************************
       HDWARE SFTWARE BLDGS & FUNN       STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////      TOTAL
                                                 LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

         165      12            5          121      66       9      36               0         4           39       457

INSTL:     9       5            3           12       8       3       9               0         1            8        21
INST:      9       5            3           12       8       3       9               0         1            7        20
(NUMBER REPORTING PER CATEGORY)

       * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
       1974-75  1975-76   1977-78      INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                          PRCJECTED                           CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

          175      254       314       351       0      35               0           0           2     33     421

INSTL:     10       13        19        20       0       2               0           0           1      2      20
INST:      10       13        19        20       0       2               0           0           1      2      20
(NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS                   ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART       MGMT  CLRK  ANA- SYS   APPL  OPER-    DOCTORATE         MASTERS        BACHELORS   UNDER  ASSOC  H-S
       TIME  TIME                   LYST PRGMR PRGMR ATORS  COM-SC OTHER   COM-SC OTHER   COM-SC OTHER   GRAD   DEG   DIPL
         11    14          6     1     0    2     2    10       0     3        0     4        0     5      5     1     6

INSTL:    7     9          6     1     0    2     2     9       0     3        0     4        0     4      4     1     5
INST:     7     9          6     1     0    2     2     9       0     3        0     4        0     4      4     1     5
(NUMBER REPORTING PER CATEGORY)

                                                                                                 ***  TYPE OF BILLING  ***
**   NUMBER OF INSTALLATIONS WHICH:
        PROVIDE: BASIC,     12:   FORTRAN,      11:      USE:   IATERACTIVE COMPUTING,        7
                 APL,        2:   GRAPHICS,      0:             REMOTE COMPUTING SERVICES,    4           1:    9
                 COBOL,      3:   RPG,           3       %FTE   0-24  25-49  50-74  75-99                 2:    2
                 PL/I,       2:   OTHER,         7       USER                                             3:    0
                 PLANIT,     0:   PASCAL,        0       SERV     27      1      1      1
                 LOGO,       0:   TUTOR,         0                                                ***  FACILITIES MGT ***
                 COURSEWRITER......              0       INSTL:   27      1      1      1                     0
                                                         INST:    26      1      1      1
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHEP EDUCATION FOR 1976-77
                  CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                            UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
   GROUP (PRIVATE:BACHELORS:500-2499    )
         TOTAL NUMBER OF INSTITUTIONS              =  458      TOTAL NUMBER OF INSTALLATIONS REPORTED      =  207
         TOTAL NUMBER OF INSTITUTIONS REPORTING =  272      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =  194

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS    **

       **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 *****************************************************
       HDWARE SFTWARE BLDGS & FURN       STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////      TOTAL
                                                 LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

        2910     270          394         4185    1725     375    1813             153       144          105     12074

INSTL:    94      45           41          136      99      43     130               8        22           12       183
INST:     86      43           40          127      97      42     122               8        22           12       172
(NUMBER REPORTING PER CATEGORY)

       * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
       1974-75  1975-76   1977-78      INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                          PROJECTED                           CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

         6545     8238     10534      9522       2     983              10           3           0   1024   11544

INSTL:    136      154       174       174       1      24               3           1           0     17     180
INST:     128      144       163       164       1      23               3           1           0     17     170
(NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS                   ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART       MGMT  CLRK  ANA- SYS   APPL  OPER-    DOCTORATE         MASTERS        BACHELORS   UNDER  ASSOC  H-S
       TIME  TIME                   LYST PRGMR PRGMR ATORS  COM-SC OTHER   CCM-SC OTHER   COM-SC OTHER   GRAD   DEG   DIPL
        400   410        142    63    35   20    93   195       4    62       12    60       26    88    197    46   194

INSTL:  117   122        112    44    27   18    57    99       4    53       12    51       18    59     61    30    78
INST:   113   119        108    43    27   18    57    95       4    53       11    50       18    57     60    30    76
(NUMBER REPORTING PER CATEGORY)

                                                                                                 ***  TYPE OF BILLING  ***
**   NUMBER OF INSTALLATIONS WHICH:
        PROVIDE: BASIC,    120:   FORTRAN,     132:      USE:   INTERACTIVE COMPUTING,       80
                 APL,       22:   GRAPHICS,     22:             REMOTE CCMPUTING SERVICES,   50           1:  117
                 COBOL,     91:   RPG,          55       %FTE   0-24  25-49  50-74  75-99                 2:   22
                 PL/I,      18:   OTHER,        49       USER                                             3:    4
                 PLANIT,     1:   PASCAL,       10       SERV    136      8     19     44
                 LOGO,       0:   TUTOR,         2                                                ***  FACILITIES MGT ***
                 COURSEWRITER......              5       INSTL:  136      8     19     44                     1
                                                         INST:   133      8     19     44
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                      CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA                        PAGE VI-20
                                UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
   GROUP (PRIVATE:BACHELORS:2500-9999  )
         TOTAL NUMBER OF INSTITUTIONS             =   24      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   11
         TOTAL NUMBER OF INSTITUTIONS REPORTING =   11      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   10

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****        *********** OPERATING  1976-77 ***********************************************
      HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////     TOTAL
                                                 LEASE    SVCS    OPER  CO-CP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

         219     38            4           623     386      39     129               0         0            0      1438

INSTL:     4      4            1             9       9       2       9               0         0            0        10
INST:      4      4            1             8       8       2       8               0         0            0         9
 (NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *   ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
      1974-75  1975-76   1977-78        INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                              CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

         629     1000      1388         1355      0      12             0           0            0       0    1367

INSTL:     7        9         9           10      0       1             0           0            0       0      10
INST:      7        8         8            9      0       1             0           0            0       0       9
 (NUMBER REPORTING PER CATEGORY)

 ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS                ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
        FULL  PART      MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE       MASTERS.       BACHELORS  UNDER  ASSOC  H-S
        TIME  TIME                  LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD    DEG   DIPL
          38    48        17    12     6     2    10    17       3     1       5     8       6    15    21      5    25

 INSTL:    9     8         9     7     6     2     9     8       2     1       2     4       3     7     4      4     8
 INST:     8     7         8     6     5     2     8     7       2     1       2     4       3     6     3      4     8
 (NUMBER REPORTING PER CATEGORY)

 **   NUMBER OF INSTALLATIONS WHICH:                                                              ***  TYPE OF BILLING  ***
          PROVIDE: BASIC,      5:   FORTRAN,       9:     USE:   INTERACTIVE COMPUTING,        3
                   APL,        3:   GRAPHICS,      0:            REMOTE COMPUTING SERVICES,    2          1:    5
                   COBOL,      9:   RPG,           8      %FTE   0-24  25-49  50-74  75-99                2:    0
                   PL/I,       1:   OTHER,         2      USER                                            3:    0
                   PLANIT,     0:   PASCAL,        0      SERV      9      1      0      1
                   LOGO,       0:   TUTOR,         0                                                 ***  FACILITIES MGT ***
                   COURSEWRITER......              0      INSTL:    9      1      0      1                    0
                                                          INST:     8      1      0      1


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                      CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                                UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
   GROUP (PRIVATE:MASTERS:  BELOW 500  )
         TOTAL NUMBER OF INSTITUTIONS             =  137      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   19
         TOTAL NUMBER OF INSTITUTIONS REPORTING =   90      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   17

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****        *********** OPERATING  1976-77 ***********************************************
      HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////     TOTAL
                                                 LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

          25      6           13           307     178      43      40               0         1            9       622

INSTL:     3      2            5             9       4       4       6               0         1            1        12
INST:      3      2            5             8       3       4       5               0         1            1        11
 (NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *   ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
      1974-75  1975-76   1977-78        INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                              CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

         300      444       675          561      0      15             0           0            0       0     576

INSTL:     7       11        11           12      0       1             0           0            0       0      12
INST:      7       10        10           11      0       1             0           0            0       0      11
 (NUMBER REPORTING PER CATEGORY)

 ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS                ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
        FULL  PART      MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE       MASTERS        BACHELORS  UNDER  ASSOC  H-S
        TIME  TIME                  LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD    DEG   DIPL
          26    19         7     5     0     1     5    16       0     3       0     5       1     9     7      2    15

 INSTL:    6     9         6     4     0     1     3     6       0     3       0     4       1     4     5      1     4
 INST:     5     8         5     4     0     1     3     5       0     3       0     4       1     3     5      1     4
 (NUMBER REPORTING PER CATEGORY)

 **   NUMBER OF INSTALLATIONS WHICH:                                                              ***  TYPE OF BILLING  ***
          PROVIDE: BASIC,      9:   FORTRAN,       3:     USE:   INTERACTIVE COMPUTING,        5
                   APL,        0:   GRAPHICS,      0:            REMOTE COMPUTING SERVICES,    6          1:    8
                   COBOL,      2:   RPG,           2      %FTE   0-24  25-49  50-74  75-99                2:    1
                   PL/I,       1:   OTHER,         1      USER                                            3:    0
                   PLANIT,     0:   PASCAL,        0      SERV     16      0      1      2
                   LOGO,       0:   TUTOR,         0                                                 ***  FACILITIES MGT ***
                   COURSEWRITER......              0      INSTL:   16      0      1      2                    0
                                                          INST:    16      0      1      2
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                            UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
    GROUP (PRIVATE:MASTERS:  500-2499   )
          TOTAL NUMBER OF INSTITUTIONS            =  220     TOTAL NUMBER OF INSTALLATIONS REPORTED     =   97
          TOTAL NUMBER OF INSTITUTIONS REPORTING  =  108     TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   83

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

       **** CAPITAL  1976-77  ****        ************ OPERATING  1976-77 ****************************************************
       HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////     TOTAL
                                                  LEASE    SVCS    OPER  CO-OP/NON-PROF  COL/UNIV  COMMERCIAL    1976-77

         1767     207          140         2449     850     141     694             123       204          97      6672

INSTL:     45      23           19           71      48      19      54               5        14           8        88
INST:      41      21           17           63      47      17      50               5        13           8        77
(NUMBER REPORTING PER CATEGORY)

       * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 *****************
       1974-75  1975-76   1977-78         INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                          PROJECTED                              CO-CP/NON-PROF   COL/UNIV   COMMERCIAL

         4307    4858      6267           5953     0      634               2          0             9     70    6668

INSTL:     66      77        85             86     0       14               1          0             1      5      88
INST:      60      71        73             76     0       12               1          0             1      5      77
(NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS             ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART      MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE      MASTERS        BACHELORS  UNDER  ASSOC  H-S
       TIME  TIME                  LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD    DEG  DIPL
        223   231        75    52    16    26    59   116       7    26       8    34       4    59   114     25   130

INSTL:   61    61        58    30    14    17    34    49       7    24       8    27       4    36    34     13    41
INST:    55    55        53    28    14    17    33    46       7    24       8    24       4    36    34     13    37
(NUMBER REPORTING PER CATEGORY)

**   NUMBER OF INSTALLATIONS WHICH:                                                               ***  TYPE OF BILLING  ***
        PROVIDE: BASIC,     56:   FORTRAN,      65:      USE:   INTERACTIVE COMPUTING,       40
                 APL,       16:   GRAPHICS,     11:             REMOTE COMPUTING SERVICES,   26           1:    52
                 COBOL,     46:   RPG,          29     %FTE   0-24  25-49  50-74  75-99                    2:    14
                 PL/I,       6:   OTHER,        25     USER                                                3:     1
                 PLANIT,     0:   PASCAL,        2     SERV     54      3     13     27
                 LOGO,       0:   TUTOR,         1                                                   ***  FACILITIES MGT ***
                 COURSEWRITER......              2     INSTL:   54      3     13     27                          1
                                                       INST:    47      3     13     27


INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                            UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
    GROUP (PRIVATE:MASTERS:  2500-9999  )
          TOTAL NUMBER OF INSTITUTIONS            =   89     TOTAL NUMBER OF INSTALLATIONS REPORTED     =   65
          TOTAL NUMBER OF INSTITUTIONS REPORTING  =   60     TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   58

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

       **** CAPITAL  1976-77  ****        ************ OPERATING  1976-77 ****************************************************
       HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////     TOTAL
                                                  LEASE    SVCS    OPER  CO-CP/NON-PROF  COL/UNIV  COMMERCIAL    1976-77

         3633     229           67         4707    2074     104    1624              72        61         451     13022

INSTL:     43      18           23           55      47      17      53               4         6           4        60
INST:      41      18           23           52      45      17      50               4         6           4        54
(NUMBER REPORTING PER CATEGORY)

       * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 *****************
       1974-75  1975-76   1977-78         INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                          PROJECTED                              CO-CP/NON-PROF   COL/UNIV   COMMERCIAL

         7499    9747     12263          10924    62       48             126          5            11    418   11594

INSTL:     47      55        59             59     1        5               5          3             3     13      59
INST:      45      53        54             53     1        5               5          3             3     13      53
(NUMBER REPORTING PER CATEGORY)

** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS             ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART      MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE      MASTERS        BACHELORS  UNDER  ASSOC  H-S
       TIME  TIME                  LYST PRGMR PRGMR ATORS  COM-SC OTHER  COM-SC OTHER  COM-SC OTHER  GRAD    DEG  DIPL
        391   311        94    66    49    33    79   164       5    14      14    44      20    89    98     36   177

INSTL:   54    44        53    36    22    22    41    49       1    12       9    33      15    37    34     20    48
INST:    53    42        51    36    22    21    40    48       1    12       9    32      14    36    33     20    46
(NUMBER REPORTING PER CATEGORY)

**   NUMBER OF INSTALLATIONS WHICH:                                                               ***  TYPE OF BILLING  ***
        PROVIDE: BASIC,     39:   FORTRAN,      56:      USE:   INTERACTIVE COMPUTING,       24
                 APL,       11:   GRAPHICS,     12:             REMOTE COMPUTING SERVICES,   14           1:    42
                 COBOL,     47:   RPG,          32     %FTE   0-24  25-49  50-74  75-99                    2:     8
                 PL/I,      13:   OTHER,        30     USER                                                3:     1
                 PLANIT,     1:   PASCAL,        4     SERV     29      7      7     22
                 LOGO,       0:   TUTOR,         3                                                   ***  FACILITIES MGT ***
                 COURSEWRITER......              5     INSTL:   29      7      7     22                          0
                                                       INST:    26      7      7     21
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                          UNDER A GRANT FRCM THE NATIONAL SCIENCE FOUNDATION                              PAGE VI-22
  GROUP (PRIVATE;MASTERS;  10000-19999)
       TOTAL NUMBER OF INSTITUTIONS            =   3      TOTAL NUMBER OF INSTALLATICNS REPORTED      =   3
       TOTAL NUMBER OF INSTITUTICNS REPORTING =   3      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   3

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 *********************************************
      HDWARE SFTWARE BLDGS & FURN       STAFF  HDWARE  SFTWARE  CTHER  //////// OFF-CAMPUS SERVICES ////////    TOTAL
                                               LEASE    SVCS    OPER  CO-CP/NCN-PROF  COL/UNIV   COMMERCIAL  1976-77

         292      0            3          686    439      80      99              0         0            0     1599

INSTL:     2      0            1            2      2       1       2              0         0            0        2
INST:      2      0            1            2      2       1       2              0         0            0        2
 (NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
      1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                             CO-CP/NON-PROF   COL/UNIV   COMMERCIAL

        1044     1238      1637        1526     0      47             0           0           0      9    1582

INSTL:     2        2         2           2     0       1             0           0           0      1       2
INST:      2        2         2           2     0       1             0           0           0      1       2
 (NUMBER REPORTING PER CATEGORY)

 ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS          ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART      MGMT  CLRK  ANA- SYS   APPL  OPER-  DOCTORATE       MASTERS      BACHELORS  UNDER  ASSOC  H-S
       TIME  TIME                  LYST PRGMR PRGMR ATORS COM-SC OTHER  CCM-SC OTHER  COM-SC OTHER  GRAD   DEG   DIPL
         58    38         7    12     4     4    10    32      1     1       2     7       3     6    12     6    35

 INSTL:   3     3         3     3     3     3     3     3      1     1       1     2       3     1     2     2     3
 INST:    3     3         3     3     3     3     3     3      1     1       1     2       3     1     2     2     3
 (NUMBER REPORTING PER CATEGORY)

 **    NUMBER OF INSTALLATIONS WHICH:                                                           ***  TYPE OF BILLING  ***
          PROVIDE: BASIC,      2:   FORTRAN,      3:     USE:   INTERACTIVE COMPUTING,        1
                   APL,        2:   GRAPHICS,     2:            REMOTE COMPUTING SERVICES,    0          1:    1
                   COBOL,      3:   RPG,          3      %FTE   0-24  25-49  50-74  75-99                2:    0
                   PL/I,       0:   OTHER,        3      USER                                            3:    0
                   PLANIT,     0:   PASCAL,       1      SERV      1      1      0      1
                   LOGO,       0:   TUTOR,        0                                                ***  FACILITIES MGT ***
                   COURSEWRITER,.....             0      INSTL:    1      1      0      1                      0
                                                         INST:     1      1      0      1


 INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATICN FCR 1976-77
                  CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                           UNDER A GRANT FROM THE NATIONAL SCIENCE FCUNDATICN
   GROUP (PRIVATE;DOCTORATE;BELOW 500  )
        TOTAL NUMBER OF INSTITUTIONS             =  73      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   7
        TOTAL NUMBER OF INSTITUTIONS REPORTING =  48      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   7

 **   ESTIMATED TOTAL EXPENDITURES IN THOUSANOS CF DOLLARS   **

       **** CAPITAL  1976-77  ****       *********** OPERATING  1976-77 *********************************************
       HDWARE SFTWARE BLCGS & FURN       STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////    TOTAL
                                                LEASE    SVCS    OPER  CO-CP/NON-PROF  COL/UNIV   COMMERCIAL  1976-77

          23   [illegible]      1          177     44       1      32              1         1            1      283

 INSTL:    2      1             1            3      2       1       2              1         1            1        6
 INST:     2      1             1            3      2       1       2              1         1            1        6
 (NUMBER REPORTING PER CATEGORY)

       * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
       1974-75  1975-76   1977-78       INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   CTHER   TOTAL
                         PRCJECTED                             CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

          131      128       154         276     0       5             0           0           0      0     281

 INSTL:     3        4         6           6     0       1             0           0           0      0       6
 INST:      3        4         6           6     0       1             0           0           0      0       6
 (NUMBER REPORTING PER CATFGORY)

 ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS          ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
       FULL  PART      MGMT  CLRK  ANA- SYS   APPL  OPER-  DOCTORATE       MASTERS      BACHFLORS  UNDER  ASSOC  H-S
       TIME  TIME                  LYST PRGMR PRGMR ATORS COM-SC OTHER  COM-SC OTHEP  COM-SC OTHEP  GRAD   DEG   DIPL
          7    14         3     0     0     2     6     1      0     4       0     1       0     8     0     0     2

 INSTL:   3     2         2     0     0     1     1     1      0     2       0     1       0     3     0     0     2
 INST:    3     2         2     0     0     1     1     1      0     2       0     1       0     3     0     0     2
 (NUMBER REPORTING PER CATEGORY)

 **    NUMBER OF INSTALLATICNS WHICH:                                                           ***  TYPE OF BILLING  ***
          PROVIDE: BASIC,      3:   FORTRAN,      3:     USE:   INTERACTIVE COMPUTING,        4
                   APL,        0:   GRAPHICS,     1:            REMOTE COMPUTING SERVICES,    2          1:    4
                   COBOL,      0:   RPG,          1      %FTE   0-24  25-49  50-74  75-95                2:    0
                   PL/I,       1:   OTHER,        3      USER                                            3:    0
                   PLANIT,     0:   PASCAL,       0      SERV      5      0      0      2
                   LOGO,       0:   TUTOR,        0                                                ***  FACILITIES MGT ***
                   COURSEWRITER,.....             0      INSTL:    5      0      0      2                      0
                                                         INST:     5      0      0      2
  INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, ANC INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATICN FOR 1976-77
                   CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSCURI-ROLLA                       PAGE VI-23
                             UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
     GROUP (PRIVATE;DOCTORATE;500-2499    )
          TOTAL NUMBER OF INSTITUTIONS              =   44      TOTAL NUMBER OF INSTALLATICNS REPORTED      =   29
          TOTAL NUMBER OF INSTITUTIONS REPORTING =   28      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   21

 **   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

       **** CAPITAL  1976-77  ****        *********** OPERATING  1976-77 ****************************************************
       HDWARE SFTWARE BLDGS & FURN          STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////      TOTAL
                                                    LEASE    SVCS    OPER  CO-OP/NON-PROF   COL/UNIV    CCMMERCIAL    1976-77

         1494     130             52         4475    2641     202    1302            53           4            26      10379

 INSTL:    20      11              8           26      20      10      22             2           2             3         29
 INST:     18      10              8           21      17      10      20             2           2             2         22
  (NUMBER REPORTING PER CATEGORY)

       * PAST & FUTURE EXPENCITURFS *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
       1974-75  1975-76   1977-78        INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                          PROJECTED                             CO-OP/NCN-PROF   COL/UNIV   COMMERCIAL

         8171     8650      9271         7508    110    1127              0           0            5     381    9131

 INSTL:    22       23        28           28      1       5              0           0            1       8      29
 INST:     21       21        21           22      1       5              0           0            1       7      22
  (NUMBER REPORTING PER CATEGORY)

 ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS                ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
        FULL   PART      MGMT   CLRK   ANA-  SYS   APPL  OPER-   DOCTORATE        MASTERS .     BACHELORS   UNDER   ASSOC   H-S
        TIME   TIME                    LYST PRGMR PRGMR ATORS  COM-SC OTHER   CCM-SC OTHER   COM-SC OTHER   GRAD     DEG   DIPL
         289     89        50     47     41    18    54   116       1     9        6    27        8    79     47      27    111

 INSTL:   23     19        20     18     14    10    18    18       1     8        5    13        5    22     10      10     17
 INST:    19     14        18     17     14    10    15    16       1     7        5    12        5    20      9      10     15
 (NUMBER REPORTING PER CATEGORY)

                                                                                                   ***  TYPE OF BILLING  ***
 **    NUMBER OF INSTALLATIONS WHICH:
           PROVIDE: BASIC,     19:   FORTRAN,      24:      USE:   INTERACTIVE COMPUTING,          19
                    APL,        6:   GRAPHICS,      9:             REMOTE COMPUTING SERVICES,       5           1:    14
                    COBOL,     16:   RPG,          10     %FTE   0-24  25-49  50-74  75-99                      2:     3
                    PL/I,       8:   OTHER,        11     USER                                                  3:     3
                    PLANIT,     0:   PASCAL,        5     SERV     18      5      1      5
                    LOGO,       0:   TUTOR,         0                                                    ***  FACILITIES MGT ***
                    COURSEWRITER,.....              1     INSTL:   18      5      1      5                        0
                                                          INST:    12      5      1      5
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   INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATICN FOR 1976-77
                    CONCUCTED BY THE COMPUTER SCIFNCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FCUNDATION
      GROUP (PRIVATE;DOCTCRATE;2500-9999  )
           TOTAL NUMBER OF INSTITUTIONS              =   71      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   62
           TOTAL NUMRER OF INSTITUTIONS REPORTING =   39      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   36

  **   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS CF DOLLARS   **

        **** CAPITAL  1976-77  ****        *********** OPERATING  1976-77 ****************************************************
        HDWARE SFTWARE BLCGS & FURN          STAFF  HDWARE  SFTWARE  OTHER  //////// OFF-CAMPUS SERVICES ////////      TOTAL
                                                     LEASE    SVCS    OPER  CO-CP/NON-PROF   COL/UNIV   COMMERCIAL    1976-77

          8696     328            468        16743   10602     438    5978          1266           0           600      45119

 INSTL:     42      21             22           56      42      29      53             2           0             3         59
 INST:      30      17             16           38      34      23      37             1           0             2         38
  (NUMBER REPORTING PER CATEGORY)

        * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 ****************
        1974-75  1975-76   1977-78        INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                           PROJECTED                             CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

         32656    36763     42181        30080    170    5428              5           1            0    2423   38107

 INSTL:     54       57        57           55      8      17              1           1            0      16      57
 INST:      36       37        36           37      8      15              1           1            0      14      37
  (NUMBER REPORTING PER CATEGORY)

  ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS                ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
         FULL   PART      MGMT   CLRK   ANA-  SYS   APPL  OPER-   DCCTORATE        MASTERS       BACHELORS   UNDER   ASSOC   H-S
         TIME   TIME                    LYST PRGMR PRGMR ATORS  COM-SC OTHER   COM-SC OTHER   COM-SC OTHER   GRAD     DEG   DIPL
         1041    656       183    205    143    94   182   386      18    48       81    70       42   248    296      69    529

 INSTL:    47     52        48     42     30    36    38    47       2    27       14    33       14    42     40      25     37
 INST:     36     37        34     33     25    31    30    35       2    22       11    27       12    32     31      22     31
  (NUMBER REPORTING PER CATEGCRY)

                                                                                                    ***  TYPF OF BILLING  ***
  **    NUMBER OF INSTALLATIONS WHICH:
            PROVIDE: BASIC,     37:   FORTRAN,      48:      USE:   INTERACTIVE COMPUTING,          24
                     APL,       19:   GRAPHICS,     21:             REMOTE COMPUTING SERVICES,      14           1:    24
                     COBCL,     42:   RPG,          18     %FTE   0-24  25-49  50-74  75-99                      2:    18
                     PL/I,      22:   OTHER,        34     USER                                                  3:     5
                     PLANIT,     1:   PASCAL,        9     SERV     38      5      5     14
                     LOGO,       1:   TUTOR,         1                                                    ***  FACILITIES MGT ***
                     COURSEWRITER,.....              5     INSTL:   38      5      5     14                        0
                                                           INST:    27      5      5     11
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INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSCURI-ROLLA                    PAGE VI-24
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
   GROUP (PRIVATE:DOCTORATE:10000-19999)
        TOTAL NUMBER OF INSTITUTIONS               =   18      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   33
        TOTAL NUMBER OF INSTITUTIONS REPORTING =   12      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =   12

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****        *********** OPERATING  1976-77 ************************************************
      HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  OTHER  ///////// OFF-CAMPUS SERVICES /////////     TOTAL
                                                 LEASE     SVCS   OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

        2348     197           104       12090   3999     256    4042               0         0              0     23036

INSTL:    18       9             7          20     16      14      18               0         0              0        20
INST:     12       8             6          13     12      10      13               0         0              0        13
 (NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 *****************
      1974-75  1975-76   1977-78        INST   STATE   FEDRL   ///// OFF-CAMPUS SERVICE INCOME /////   OTHER   TOTAL
                        PROJECTED                              CO-CP/NON-PROF   COL/UNIV   COMMERCIAL

        21194    23471     28389       17588     226    4539             139          3          190   1178   23863

INSTL:     18       19        19          16       2       8               1          1            1      8      19
INST:      13       13        13          12       2       5               1          1            1      7      12
 (NUMBER REPORTING PER CATEGORY)

 ** NUMBER OF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
        FULL  PART     MGMT  CLRK  ANA- SYS   APPL  OPER-   DOCTORATE        MASTERS       BACHELORS  UNDER  ASSOC  H-S
        TIME  TIME                 LYST PRGMR PRGMR ATORS  COM-SC OTHER   COM-SC OTHER   COM-SC OTHER  GRAD   DEG   DIPL
         721   202      103   121    77   100   136   227       3    21       16    57       27   143    94     28   250

INSTL:   20    19        21    18    13    19    18    19       2     9        8    18        7    16    13      9    16
INST:    13    12        13    13    10    12    13    13       2     6        8    13        7    12    11      8    13
 (NUMBER REPORTING PER CATEGORY)

**   NUMBER OF INSTALLATICNS WHICH:                                                                *** TYPE OF BILLING ***
        PROVIDE: BASIC,     18:   FORTRAN,      23:     USE:   INTERACTIVE COMPUTING,        14
                 APL,        8:   GRAPHICS,     14:            REMOTE COMPUTING SERVICES,    13          1:     7
                 COBOL,     15:   RPG,           8      %FTE   0-24  25-49  50-74  75-99                 2:     4
                 PL/I,      11:   OTHER,        11      USER                                             3:     4
                 PLANIT,     0:   PASCAL,        7      SERV     25      1      0/     7
                 LOGO,       0:   TUTOR,         1                                                 *** FACILITIES MGT ***
                 COURSEWRITER,.....              0      INSTL:   25      1      0      7                      2
                                                        INST:     9      1      0      6


INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
   GROUP (PRIVATE:DOCTCRATE:ABOVE 20000)
        TOTAL NUMBER OF INSTITUTIONS               =    9      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   16
        TOTAL NUMBER OF INSTITUTIONS REPORTING =    5      TOTAL NUMBER OF INSTITUTIONS RPTING INSTAL =    5

**   ESTIMATED TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS   **

      **** CAPITAL  1976-77  ****        *********** OPERATING  1976-77 ************************************************
      HDWARE SFTWARE BLDGS & FURN        STAFF  HDWARE  SFTWARE  OTHER  ///////// OFF-CAMPUS SERVICES ////////     TOTAL
                                                 LEASE     SVCS   OPER  CO-OP/NON-PROF  COL/UNIV   COMMERCIAL   1976-77

        7952      38            60        4583   2888     111    1126               0       146              0     16904

INSTL:    13       5             5          12     11       7      11               0         1              0        15
INST:      4       4             3           5      5       4       5               0         1              0         5
 (NUMBER REPORTING PER CATEGORY)

      * PAST & FUTURE EXPENDITURES *  ********* SOURCES OF INCOME (THOUSANDS OF DOLLARS) 1976-77 *****************
      1974-75  1975-76   1977-78        INST   STATE   FEDRL   ///// OFF-CAMPUS SFRVICE INCOME /////   OTHER   TOTAL
                        PRCJECTED                              CO-OP/NON-PROF   COL/UNIV   COMMERCIAL

         8555     9593     10435       16215      15    1117              96          0            0    251   17694

INSTL:     12       12        13          14       1       6               2          0            0      5      14
INST:       5        5         5           5       1       4               2          0            0      3       5
 (NUMBER REPORTING PER CATEGORY)

 ** NUMBER CF PEOPLE *** FULL-TIME EQUIVALENTS              ** HIGHEST LEVEL OF DEGREE (NUMBER OF PEOPLE) *************
        FULL  PART     MGMT  CLRK  ANA- SYS   APPL  GPER-   DOCTORATE        MASTERS       BACHELORS  UNDER  ASSOC  H-S
        TIME  TIME                 LYST PRGMR PRGMR ATORS  COM-SC OTHER   COM-SC OTHER   COM-SC OTHER  GRAD   DFG   DIPL
         279   202       50    48    49    33    51    87       0    43       12    46       13    92    56      9    57

INSTL:   11    11        10     8     7     8    10     9       0    10        6     8        4    10     7      3     7
INST:     5     5         5     5     5     5     5     5       0     4        4     4        3     5     3      2     4
 (NUMBER REPORTING PER CATEGORY)

**   NUMBER OF INSTALLATIONS WHICH:                                                                *** TYPE OF BILLING ***
        PROVIDE: BASIC,     10:   FORTRAN,      10:     USE:   INTERACTIVE COMPUTING,         7
                 APL,        4:   GRAPHICS,      5:            REMOTE COMPUTING SERVICES,     4          1:     9
                 COBOL,      7:   RPG,           4      %FTE   0-24  25-49  50-74  75-99                 2:     2
                 PL/I,       5:   OTHER,         9      USER                                             3:     2
                 PLANIT,     0:   PASCAL,        4      SERV      9      2      1      4
                 LOGO,       2:   TUTOR,         0                                                 *** FACILITIES MGT ***
                 COURSEWRITER,.....              0      INSTL:    9      2      1      4                      0
                                                        INST:     4      1      1      4
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VII. SUMMARIES FROM FORM 1: COMPUTERS

The following variables and levels were used for summarizing the responses:

Type of Control

1. Public
2. Private

Highest Degree Offered

1. Associate
2. Bachelor's
3. Master's
4. Doctorate

Fall 1975
Enrollment Class

1. Less than 500
2. 500 - 2,499
3. 2,500 - 9,999
4. 10,000 -19,999
5. 20,000 and above

Summaries for the combined levels (three-way) of the control variables, and the total population are presented provided that there were enough institutions included and/or reporting in the category to preclude identification of the institutions involved (i.e., at least two institutions must have reported in a group for the summary of that group to be included).

Each group summary is identified by the levels of three control variables. For example, group (Public, ,) identifies the summary for all public institutions. Since all of the summaries are identical in format, only one will be discussed here as a guide. The total group is chosen for this purpose, i.e., group (, ,).

The summaries focus on particular computer systems in use in the group of institutions being considered. The computer system is identified by manufacturer name and model or the name of the computer if it is a noncommercial one. Referring to the CDC 6400, we see that there were thirteen (13) machines installed "prior to June 30, 1977" and 2 were to have been added before December 31, 1977. Five were "leased" from the manufacturer ("MFG"), at least partially, and nine were purchased, at least partially, from the manufacturer. Seven were utilized more than three shifts (528 hrs./mo.), three were in use more than two shifts (352 hrs./mo.) but less than three shifts (528 hrs./mo.), one was in use more than one shift (176 hrs./mo.) but less than two shifts and two were used less than one shift.

Under "Percent Usage by Type" nine were not reported as being used for research (RES); two were used approximately 10 percent for research; three 20 percent, and one 40 percent.

One CDC 6400 had at least nine, but less than 12 tape drives, six between three and six and five had three or less tape drives. Twelve CDC 6400's had more than 301,000 characters of core storage and one had more than 51K but less than 151K. Eleven had disk (DK) storage, nine had communications capabilities for batch and seven had interactive capabilities.

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INVENTORY OF COMPUTERS, APPLICATIONS CF COMPUTERS, ANC INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                      UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                    PAGE VII-02

                                              SUMMARY OF COMPUTERS
     GROUP (                                )

   MODEL     NUMBER    NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER   CORE CAP   ADDL      COMM PORTS
MFG NO.      LEASED  PURCHASED    AVG    ****                 PERCENT                 *  TAPE     THOUSAND   STORAGE   ***********
           MFG H-CO MFG OTHR HRS     NO  TYPE N/O 10  20  30  40  50  60  70  80 90 100  DRIVES   OF CHARS   TYPE NO   BTCH INTRACT

ADG AD/4      0    0    1    0  >528  0  RES   0   0   0   0   0   0   0   0   0  0   1  >12  0  >301   0  DSK  0      0       0
     **********************     >352  1  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:           *   >176  0  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77    1 *   >  0  0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77    0 *            OTH   0   1   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

ADG AGT/30    0    0    2    0  >528  2  RES   0   0   1   0   0   0   0   0   0  0   1  >12  0  >301   0  DSK  1      0       1
     **********************     >352  0  ADM   2   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:           *   >176  0  INS   1   0   0   0   0   0   0   0   0  1   0  > 6  0  >151   1
     *   PRIOR 30JUN77    2 *   >  0  0  H.ED  2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   1
     *   AFTER 30JUN77    0 *            OTH   2   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   0

ADG AGT/50    0    0    1    0  >528  1  RES   0   0   0   0   0   0   0   0   0  0   1  >12  0  >301   0  DSK  0      0       0
     **********************     >352  0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLFD:           *   >176  0  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77    1 *   >  0  0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77    0 *            OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   0

ADM 100       0    0    1    0  >528  0  RES   0   0   0   0   0   1   0   0   0  0   0  >12  0  >301   0  DSK  1      0       0
     **********************     >352  0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:           *   >176  1  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77    1 *   >  0  0  H.ED  0   0   0   0   0   1   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77    0 *            OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   1

ADS 1800      0    0    0    0  >528  0  RES   2   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  0      0       0
     **********************     >352  0  ADM   2   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:           *   >176  0  INS   2   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRICR 30JUN77    2 *   >  0  0  H.ED  2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77    0 *            OTH   2   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

ADS 1800E     0    0    2    0  >528  2  RES   0   0   0   0   0   0   0   0   0  0   2  >12  0  >301   0  DSK  0      0       2
     **********************     >352  0  ADM   2   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLFD:           *   >176  0  INS   2   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRICR 30JUN77    2 *   >  0  0  H.ED  2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77    0 *            OTH   2   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   2

ALT 8800      0    0    1    1 *>528  1  RES   1   0   0   0   0   0   0   0   0  1   0  >12  0  >301   0  DSK  1      0       1
     **********************     >352  0  ADM   2   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:           *   >176  0  INS   0   1   0   0   0   0   0   0   0  0   1  > 6  0  >151   0
     *   PRICR 30JUN77    1 *   >  0  0  H.ED  2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77    1 *            OTH   2   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   1

ALT 8800A     0    0    0    1  >528  1  RES   0   0   0   0   0   0   0   0   0  0   1  >12  0  >301   0  DSK  0      0       1
     **********************     >352  0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  1
     * INSTALLED:           *   >176  0  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRICR 30JUN77    1 *   >  0  0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77    0 *            OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   1

AMD 470V/6    0    1    2    0  >528  3  RES   1   1   0   0   0   1   0   1   0  0   0  >12  1  >301   3  DSK  3      3       3
     **********************     >352  0  ADM   2   0   0   1   1   0   0   0   0  0   0  > 9  2  >251   0  OTH  1
     * INSTALLED:           *   >176  0  INS   1   1   0   1   1   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77    4 *   >  0  0  H.ED  4   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77    0 *            OTH   2   2   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

ART ONICP12   0    0    0    0  >528  0  RES   1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  0      0       0
     **********************     >352  0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:           *   >176  0  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRICR 30JUN77    1 *   >  0  0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77    0 *            OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

BA4 350       0    0    0    1  >528  1  RES   1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  1      0       1
     **********************     >352  0  ADM   0   0   0   0   0   0   0   0   0  1   0  > 9  0  >251   0  OTH  0
     * INSTALLED:           *   >176  0  INS   0   1   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77    1 *   >  0  0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77    0 *            OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   1

BIT 3000      0    0    1    0  >528  1  RES   0   1   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  1      0       1
     **********************     >352  0  ADM   0   0   0   0   1   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:           *   >176  0  INS   0   0   0   0   0   0   1   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77    1 *   >  0  0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77    0 *            OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   1

BIT 4000      0    0    2    1  >528  0  RES   2   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  2      0       2
     **********************     >352  0  ADM   1   0   0   0   0   0   0   0   1  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:           *   >176  0  INS   1   0   0   1   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77    0 *   >  0  0  H.ED  2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   2
     *   AFTER 30JUN77    2 *            OTH   2   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   0

BIT 4000/15   0    0    1    0  >528  1  RES   1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  1      0       1
     **********************     >352  0  ADM   0   0   0   0   0   0   0   0   0  0   1  > 9  0  >251   0  OTH  1
     * INSTALLED:           *   >176  0  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77    1 *   >  0  0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   1
     *   AFTER 30JUN77    0 *            OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   0
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      INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                   CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA                          PAGE VII-03
                                  UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                  SUMMARY OF COMPUTERS
      GROUP (                                )

     MODEL    NUMBER    NUMBER  AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER    CORE CAP  ADDL      COMM PORTS
MFG  NO.      LEASED  PURCHASED   AVG     ****                  PERCENT                *  TAPE      THOUSAND  STORAGE   ***********
             MFG H-CO MFG CTHR HRS   ND  TYPE N/O  10  20  30  40  50  60  70  80  90 100  DRIVES    OF CHARS  TYPE NO   BTCH INTRACT

BUR 1100     1    0    0    0 >528   0  RES     1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     1      0
     ***********************  >352   0  ADM     0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251   0  OTH   0
     * INSTALLED:          *  >176   0  INS     1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77    1 *  >  0   1  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *  AFTER 30JUN77    0 *            OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

BUR 1700     5    0    1    0 >528   1  RES     4   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   4     3      0
     ***********************  >352   0  ADM     1   1   0   0   0   0   1   0   1   0   1  > 9  0  >251   0  OTH   0
     * INSTALLED:          *  >176   2  INS     1   0   1   0   1   0   0   0   0   1   1  > 6  0  >151   0
     *  PRIOR 30JUN77    5 *  >  0   2  H.ED    5   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   3
     *  AFTER 30JUN77    0 *            OTH     5   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

BUR 1705     0    0    1    0 >528   0  RES     1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     1      1
     ***********************  >352   0  ADM     0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251   0  OTH   0
     * INSTALLED:          *  >176   1  INS     1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77    1 *  >  0   0  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
     *  AFTER 30JUN77    0 *            OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

BUR 1712     0    0    2    0 >528   0  RES     1   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   2     1      0
     ***********************  >352   0  ADM     0   0   1   0   0   0   0   0   0   1   0  > 9  0  >251   0  OTH   0
     * INSTALLED:          *  >176   1  INS     0   1   0   0   0   0   0   0   1   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77    2 *  >  0   1  H.ED    2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
     *  AFTER 30JUN77    0 *            OTH     2   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

BUR 1714     0    0    5    0 >528   0  RES     4   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   5     0      0
     ***********************  >352   0  ADM     1   0   0   0   0   0   1   1   1   1   0  > 9  0  >251   0  OTH   0
     * INSTALLED:          *  >176   2  INS     1   1   0   2   1   0   0   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77    5 *  >  0   2  H.ED    5   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   3
     *  AFTER 30JUN77    0 *            OTH     5   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   1

BUR 1716     1    0    1    0 >528   0  RES     2   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   2     1      0
     ***********************  >352   0  ADM     0   0   0   0   0   0   0   0   1   0   1  > 9  0  >251   0  OTH   0
     * INSTALLED:          *  >176   1  INS     1   0   1   0   0   0   0   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77    2 *  >  0   1  H.ED    2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
     *  AFTER 30JUN77    0 *            OTH     2   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

BUR 1720     0    0    1    0 >528   0  RES     1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     1      1
     ***********************  >352   0  ADM     1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:          *  >176   0  INS     1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   1
     *  PRIOR 30JUN77    0 *  >  0   0  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *  AFTER 30JUN77    1 *            OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

BUR 1724     1    0    0    0 >528   0  RES     1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     0      0
     ***********************  >352   0  ADM     0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251   0  OTH   0
     * INSTALLED:          *  >176   0  INS     0   1   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77    0 *  >  0   0  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
     *  AFTER 30JUN77    1 *            OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

BUR 1726     5    1    5    0 >528   2  RES     7   3   1   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  11     7      7
     ***********************  >352   1  ADM     1   0   0   0   0   0   3   3   2   0   2  > 9  0  >251   0  OTH   0
     * INSTALLED:          *  >176   6  INS     2   0   3   3   2   0   0   0   1   0   0  > 6  0  >151   3
     *  PRIOR 30JUN77   11 *  >  0   1  H.ED   11   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   8
     *  AFTER 30JUN77    0 *            OTH    11   0   0   0   0   0   0   0   0   0   0  > 0  6  >  0   0

BUR 1728     0    0    1    0 >528   0  RES     0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     1      0
     ***********************  >352   0  ADM     0   0   0   0   0   0   0   0   0   1   0  > 9  0  >251   1  OTH   0
     * INSTALLED:          *  >176   0  INS     0   1   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
     *  PRICR 30JUN77    1 *  >  0   1  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *  AFTER 30JUN77    0 *            OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

BUR 2500     1    0    0    0 >528   0  RES     0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     0      0
     ***********************  >352   1  ADM     0   0   0   0   0   0   0   0   0   1   0  > 9  0  >251   0  OTH   0
     * INSTALLED:          *  >176   0  INS     0   1   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
     *  PRICR 30JUN77    1 *  >  0   0  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
     *  AFTER 30JUN77    0 *            OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

BUR 2520     1    0    0    0 >528   0  RES     1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     0      0
     ***********************  >352   0  ADM     0   0   0   0   0   1   0   0   0   0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:          *  >176   1  INS     0   0   0   0   0   1   0   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77    1 *  >  0   0  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   0
     *  AFTER 30JUN77    0 *            OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

BUR 2700     3    0    4    0 >528   1  RES     4   2   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   6     4      5
     ***********************  >352   1  ADM     0   1   0   0   0   2   0   1   2   0   0  > 9  0  >251   1  OTH   1
     * INSTALLED:          *  >176   4  INS     1   0   1   1   1   1   0   0   0   1   0  > 6  0  >151   2
     *  PRIOR 30JUN77    6 *  >  0   0  H.ED    6   0   0   0   0   0   0   0   0   0   0  > 3  3  > 51   3
     *  AFTER 30JUN77    0 *            OTH     5   1   0   0   0   0   0   0   0   0   0  > 0  3  >  0   0

BUR 2771     1    0    0    0 >528   0  RES     1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     1      1
     ***********************  >352   1  ADM     0   0   0   0   1   0   0   0   0   0   0  > 9  0  >251   1  OTH   0
     * INSTALLED:          *  >176   0  INS     0   0   0   0   0   0   1   0   0   0   0  > 6  0  >151   0
     *  PRICR 30JUN77    1 *  >  0   0  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *  AFTER 30JUN77    0 *            OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0
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                                                  SUMMARY OF COMPUTERS

       GROUP I

      MODEL     NUMBER    NUMBER    AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER   CORE CAP   ADDL      COMM PORTS
MFG   NO.       LEASED  PURCHASED    AVG    ****                 PERCENT                  *  TAPE     THOUSAND   STORAGE   ***********
              MFG H-CO  MFG OTHR   HRS   NO TYPE N/O 10  20  30  40  50  60  70  80 90 100 DRIVES   OF CHARS   TYPE NO   BTCH INTRACT

BUR 3000       0    0    1    0  >528   0  RES   3   0   0   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK   0     1      0
    ***********************      >352   0  ADM   2   0   0   0   0   0   0   0   0  0   1  > 9  0   >251   0  OTH   0
     * INSTALLED:          *     >176   0  INS   1   0   0   0   0   0   0   0   0  0   2  > 6  0   >151   0
     *   PRIOR 30JUN77   3 *     >  0   3  H.ED  3   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
     *   AFTER 30JUN77   0 *               OTH   3   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   3

BUR 3500       2    0    1    0  >528   0  RES   2   1   0   0   0   0   0   0   0  0   0  >12  0   >301   2  DSK   3     2      1
    ***********************      >352   2  ADM   0   0   0   0   0   0   0   1   0  0   2  > 9  0   >251   0  OTH   1
     * INSTALLED:          *     >176   1  INS   2   0   0   1   0   0   0   0   0  0   0  > 6  0   >151   1
     *   PRIOR 30JUN77   3 *     >  0   0  H.ED  3   0   0   0   0   0   0   0   0  0   0  > 3  2   > 51   0
     *   AFTER 30JUN77   0 *               OTH   3   0   0   0   0   0   0   0   0  0   0  > 0  1   >  0   0

BUR 3506       1    0    0    0  >528   0  RES   1   0   0   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK   1     1      0
    ***********************      >352   1  ADM   0   0   0   0   0   0   0   0   1  0   0  > 9  0   >251   0  OTH   0
     * INSTALLED:          *     >176   0  INS   0   0   1   0   0   0   0   0   0  0   0  > 6  0   >151   1
     *   PRIOR 30JUN77   1 *     >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  1   > 51   0
     *   AFTER 30JUN77   0 *               OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

BUR 3741       0    0    1    0  >528   0  RES   1   0   0   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK   1     1      1
    ***********************      >352   0  ADM   0   0   0   0   0   0   0   0   0  0   1  > 9  0   >251   0  OTH   1
     * INSTALLED:          o     >176   1  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0   >151   1
     *   PRIOR 30JUN77   1 *     >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
     *   AFTER 30JUN77   0 *               OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1   >  0   0

BUR 4000       0    0    1    0  >528   0  RES   1   0   0   0   0   0   0   0   0  0   0  >12  0   >301   0  CSK   0     0      0
    ***********************      >352   0  ADM   0   0   0   0   0   0   0   0   0  0   1  > 9  0   >251   0  OTH   0
     * INSTALLED:          *     >176   0  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0   >151   0
     *   PRICR 30JUN77   1 *     >  0   1  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
     *   AFTER 30JUN77   0 *               OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

BUR 4700       3    0    2    0  >528   0  RES   3   1   1   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK   5     3      4
    ***********************      >352   2  ADM   0   0   0   0   0   1   1   0   0  0   3  > 9  0   >251   0  CTH   1
     * INSTALLED:          *     >176   2  INS   3   0   0   1   0   1   0   0   0  0   0  > 6  0   >151   2
     *   PRIOR 30JUN77   4 *     >  0   1  H.ED  5   0   0   0   0   0   0   0   0  0   0  > 3  1   > 51   3
     *   AFTER 30JUN77   1 *               OTH   5   0   0   0   0   0   0   0   0  0   0  > 0  4   >  0   0

BUR 4771       4    0    2    0  >528   2  RES   3   1   0   0   0   0   0   0   0  0   0  >12  0   >301   1  DSK   4     3      3
    ***********************      >352   0  ADM   0   0   0   1   0   0   0   0   1  1   1  > 9  0   >251   0  OTH   2
     * INSTALLED:          *     >176   2  INS   1   1   1   0   0   0   0   1   0  0   0  > 6  0   >151   1
     *   PRICR 30JUN77   4 *     >  0   0  H.ED  4   0   0   0   0   0   0   0   0  0   0  > 3  2   > 51   2
     *   AFTER 30JUN77   0 *               OTH   4   0   0   0   0   0   0   0   0  0   0  > 0  2   >  0   0

BUR 5000       0    0    1    0  >528   0  RES   1   0   0   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK   0     0      0
    ***********************      >352   0  ADM   0   0   0   0   0   0   0   0   0  0   1  > 9  0   >251   0  OTH   0
     * INSTALLED:          *     >174   0  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0   >151   0
     *   PRIOR 30JUN77   1 *     >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
     *   AFTER 30JUN77   0 *               OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

BUR 5500       0    0    3    2  >528   1  RES   2   4   0   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK   5     3      5
    ***********************      >352   0  ADM   1   0   0   1   2   0   1   0   1  0   0  > 9  0   >251   3  OTH   0
     * INSTALLED:          *     >176   2  INS   0   1   0   0   1   2   0   1   0  0   1  > 6  0   >151   1
     *   PRIOR 30JUN77   6 *     >  0   2  H.ED  6   0   0   0   0   0   0   0   0  0   0  > 3  2   > 51   0
     *   AFTER 30JUN77   0 *               OTH   6   0   0   0   0   0   0   0   0  0   0  > 0  4   >  0   2

BUR 5700       1    0    4    2  >528   1  RES   2   2   0   0   1   0   0   0   0  0   0  >12  0   >301   2  DSK   5     4      3
    ***********************      >352   2  ADM   3   0   0   0   1   0   0   1   0  0   0  > 9  0   >251   2  OTH   0
     * INSTALLED:          *     >176   2  INS   0   0   0   1   0   1   1   0   0  0   2  > 6  0   >151   1
     *   PRIOR 30JUN77   5 *     >  0   0  H.ED  5   0   0   0   0   0   0   0   0  0   0  > 3  5   > 51   0
     *   AFTER 30JUN77   0 *               OTH   5   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

BUR 6700       6    1    7    0  >528   5  RES   4   2   1   1   1   0   0   0   0  0   1  >12  0   >301  10  DSK  10     6     10
    ***********************      >352   3  ADM   2   0   0   1   1   3   2   0   0  0   1  > 9  0   >251   0  CTH   0
     * INSTALLED:          *     >176   0  INS   3   0   3   0   4   0   0   0   0  0   0  > 6  1   >151   0
     *   PRIOR 30JUN77   8 *     >  0   0  H.ED  8   2   0   0   0   0   0   0   0  0   0  > 3  5   > 51   0
     *   AFTER 30JUN77   2 *               OTH   6   4   0   0   0   0   0   0   0  0   0  > 0  4   >  0   0

BUR 6746       1    0    0    0  >528   1  RES   0   0   0   0   1   0   0   0   0  0   0  >12  0   >301   1  DSK   1     1      1
    ***********************      >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0   >251   0  OTH   1
     * INSTALLED:          *     >176   0  INS   0   0   0   0   0   0   1   0   0  0   0  > 6  0   >151   0
     *   PRIOR 30JUN77   0 *     >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  1   > 51   0
     *   AFTER 30JUN77   1 *               OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

BUR 6803       2    0    2    0  >528   0  RES   2   0   0   0   0   0   0   0   0  0   0  >12  0   >301   2  DSK   2     2      2
    ***********************      >352   0  ADM   2   0   0   0   0   0   0   0   0  0   0  > 9  0   >251   0  OTH   0
     * INSTALLED:          *     >176   0  INS   2   0   0   0   0   0   0   0   0  0   0  > 6  0   >151   0
     *   PRIOR 30JUN77   0 *     >  0   0  H.ED  2   0   0   0   0   0   0   0   0  0   0  > 3  2   > 51   0
     *   AFTER 30JUN77   2 *               OTH.  2   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

BUR 6805       0    0    1    0  >528   0  RES   1   0   0   0   0   0   0   0   0  0   0  >12  0   >301   1  DSK   1     1      1
    ***********************      >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0   >251   0  OTH   0
     * INSTALLED:          *     >176   0  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0   >151   0
     *   PRIOR 30JUN77   0 *     >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
     *   AFTER 30JUN77   1 *               OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1   >  0   0
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INVENTORY OF COMPUTERS, APPLICATIONS CF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                  CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA                              PAGE VII-05
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                   SUMMARY OF COMPUTERS

      GROUP (                                 )

    MODEL     NUMBER    NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER   CORE CAP   ADDL       COMM PORTS
                                           ****              PERCENT                   *   TAPE     THOUSAND   STORAGE    ***********
MFG  NO.      LEASED  PURCHASED   AVG      TYPE N/O  10  20  30  40  50  60  70  80  90 100  DRIVES   OF CHARS   TYPE NO    BTCH INTRACT
             MFG H-CC MFG OTHR  HRS   NO

BUR 6807     0   0   1   0  >528   0  RES   0   1   0   0   0   0   0   0   0   0   0  >12  0  >301  1  DSK  1      0      1
    ***********************  >352   0  ADM   0   0   0   0   0   0   0   0   1   0   0  > 9  0  >251  0  OTH  0
    * INSTALLED:          *  >176   0  INS   0   1   0   0   0   0   0   0   0   0   0  > 6  0  >151  0
    *  PRIOR 30JUN77    1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
    *  AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0  0

BUR 700      1   0   0   1  >528   1  RES   2   0   0   0   0   0   0   0   0   0   0  >12  0  >301  0  DSK  1      1      0
    ***********************  >352   0  ADM   0   0   0   0   0   0   1   0   0   0   1  > 9  0  >251  0  OTH  0
    * INSTALLED:          *  >176   0  INS   1   0   0   0   1   0   0   0   0   0   0  > 6  0  >151  1
    *  PRIOR 30JUN77    2 *  >  0   0  H.ED  2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
    *  AFTER 30JUN77    0 *           OTH   2   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0  1

BUR 702      0   0   1   0  >528   0  RES   1   0   0   0   0   0   0   0   0   0   0  >12  0  >301  0  DSK  1      1      0
    ***********************  >352   0  ADM   0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251  0  OTH  0
    * INSTALLED:          *  >176   0  INS   1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151  0
    *  PRIOR 30JUN77    1 *  >  0   1  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
    *  AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  1

BUR 731      0   0   1   0  >528   0  RES   1   0   0   0   0   0   0   0   0   0   0  >12  0  >301  0  DSK  1      0      0
    ***********************  >352   0  ADM   0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251  0  OTH  0
    * INSTALLED:          *  >176   0  INS   1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151  0
    *  PRIOR 30JUN77    1 *  >  0   1  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
    *  AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  1

BUR 761      0   0   1   0  >528   0  RES   1   0   0   0   0   0   0   0   0   0   0  >12  0  >301  0  DSK  0      1      0
    ***********************  >352   0  ADM   0   1   0   0   0   0   0   0   0   0   0  > 9  0  >251  0  OTH  0
    * INSTALLED:          *  >176   1  INS   0   0   0   0   0   0   0   0   0   0   1  > 6  0  >151  0
    *  PRIOR 30JUN77    1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
    *  AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  1

BUR 771      1   0   1   0  >528   0  RES   2   0   0   0   0   0   0   0   0   0   0  >12  0  >301  0  DSK  0      2      0
    ***********************  >352   0  ADM   1   0   0   0   0   1   0   0   0   0   0  > 9  0  >251  0  OTH  0
    * INSTALLED:          *  >176   2  INS   0   0   0   0   0   1   0   0   0   0   1  > 6  0  >151  0
    *  PRIOR 30JUN77    2 *  >  0   0  H.ED  2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
    *  AFTER 30JUN77    0 *           OTH   2   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  1

BUR 8000     0   0   1   0  >528   0  RES   1   0   0   0   0   0   0   0   0   0   0  >12  0  >301  0  DSK  0      0      0
    ***********************  >352   0  ADM   0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251  0  OTH  0
    * INSTALLED:          *  >176   0  INS   1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151  0
    *  PRIOR 30JUN77    1 *  >  0   1  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
    *  AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  1

BUR 9000     0   0   3   0  >528   0  RES   3   0   0   0   0   0   0   0   0   0   0  >12  0  >301  0  DSK  0      3      0
    ***********************  >352   0  ADM   0   0   0   0   0   3   0   0   0   0   0  > 9  0  >251  0  OTH  0
    * INSTALLED:          *  >176   3  INS   0   0   0   0   0   3   0   0   0   0   0  > 6  0  >151  0
    *  PRIOR 30JUN77    3 *  >  0   0  H.ED  3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
    *  AFTER 30JUN77    0 *           OTH   3   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  0

BUR 9700     0   0   1   0  >528   0  RES   1   0   0   0   0   0   0   0   0   0   0  >12  0  >301  0  DSK  0      0      1
    ***********************  >352   0  ADM   0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251  0  OTH  1
    * INSTALLED:          *  >176   0  INS   1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151  0
    *  PRICR 30JUN77    1 *  >  0   1  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
    *  AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  1

CAU LSI      0   0   1   0  >528   1  RES   0   0   0   0   0   0   0   0   1   0   0  >12  0  >301  0  DSK  1      0      0
    ***********************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251  0  OTH  0
    * INSTALLED:          *  >176   0  INS   0   0   1   0   0   0   0   0   0   0   0  > 6  0  >151  0
    *  PRICR 30JUN77    1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
    *  AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  1

CAU LSI16    0   0   1   0  >528   1  RES   0   0   0   0   0   0   0   0   0   0   1  >12  0  >301  0  DSK  1      0      0
    ***********************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251  0  CTH  0
    * INSTALLED:          *  >176   0  INS   1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151  0
    *  PRICR 30JUN77    1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
    *  AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0  1

CAU LSI2/20  0   0   0   0  >528   0  RES   0   0   0   0   0   0   0   0   0   0   1  >12  0  >301  0  DSK  0      0      0
    ***********************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251  0  OTH  0
    * INSTALLED:          *  >176   0  INS   1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151  0
    *  PRIOR 30JUN77    1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
    *  AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  0

CAU 70/10    1   0   0   0  >528   1  RES   1   0   0   0   0   0   0   0   0   0   0  >12  0  >301  0  DSK  0      1      1
    ***********************  >352   0  ADM   0   0   0   0   0   0   1   0   0   0   0  > 9  0  >251  0  OTH  0
    * INSTALLED:          *  >176   0  INS   0   1   0   0   0   0   0   0   0   0   0  > 6  0  >151  0
    *  PRIOR 30JUN77    1 *  >  0   0  H.ED  0   0   0   1   0   0   0   0   0   0   0  > 3  0  > 51  0
    *  AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0  1

CAU 77/80    0   0   1   0  >528   0  RES   0   0   0   0   0   0   0   0   0   0   1  >12  0  >301  0  DSK  0      0      0
    ***********************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251  0  OTH  0
    * INSTALLED:          *  >176   1  INS   1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151  0
    *  PRIOR 30JUN77    1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
    *  AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  1
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
              CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                      UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                        SUMMARY OF COMPUTERS
     GROUP (                            )

    MODEL     NUMBER    NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER    CORE CAP   ADDL     COMM PORTS
MFG  NO.      LEASED   PURCHASED   AVG    ****                 PERCENT                   *  TAPE      THOUSAND   STORAGE  ***********
             MFG H-CO MFG OTHR  HRS   NO  TYPE N/O  10  20  30  40  50  60  70  80  90 100  DRIVES    OF CHARS   TYPE NO  BTCH INTRACT

CDC CYB171    1    0    0    0 >528   0  RES    0   0   0   0   1   0   0   0   0   0   0  >12  0   >301  1   DSK  1     1      1
    **********************     >352   1  ADM    0   0   1   0   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  0
    * INSTALLED:           *   >176   0  INS    0   0   0   0   1   0   0   0   0   0   0  > 6  0   >151  0
    *  PRIOR 30JUN77    1 *    >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  1   > 51  0
    *  AFTER 30JUN77    0 *              OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0   >  0  0

CDC CYB172    1    0    1    0 >528   0  RES    0   0   0   1   0   0   0   0   1   0   0  >12  0   >301  1   DSK  1     1      1
    **********************     >352   1  ADM    1   0   0   1   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  0
    * INSTALLED:           *   >176   0  INS    0   0   1   1   0   0   0   0   0   0   0  > 6  0   >151  0
    *  PRIOR 30JUN77    2 *    >  0   0  H.ED   1   1   0   0   0   0   0   0   0   0   0  > 3  1   > 51  0
    *  AFTER 30JUN77    0 *              OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  0   >  0  0

CDC CYB173    2    0    0    0 >528   1  RES    1   1   0   0   0   0   0   0   0   0   0  >12  0   >301  0   DSK  1     0      0
    **********************     >352   0  ADM    2   0   0   0   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  0
    * INSTALLED:           *   >176   0  INS    1   0   0   0   0   0   0   0   0   1   0  > 6  0   >151  1
    *  PRIOR 30JUN77    2 *    >  0   0  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  0   > 51  0
    *  AFTER 30JUN77    0 *              OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  1   >  0  0

CDC CYB175    1    1    2    0 >528   2  RES    0   0   1   0   0   0   0   1   0   0   0  >12  0   >301  1   DSK  2     0      1
    **********************     >352   0  ADM    1   0   0   0   1   0   0   0   0   0   0  > 9  0   >251  0   OTH  1
    * INSTALLED:           *   >176   0  INS    0   0   0   1   1   0   0   0   0   0   0  > 6  1   >151  0
    *  PRIOR 30JUN77    2 *    >  0   0  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  1   > 51  1
    *  AFTER 30JUN77    0 *              OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  0   >  0  0

CDC CYB71     0    0    2    0 >528   2  RES    0   0   0   1   0   1   0   0   0   0   0  >12  0   >301  1   DSK  2     0      2
    **********************     >352   0  ADM    1   0   0   1   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  0
    * INSTALLED:           *   >176   0  INS    0   0   0   0   0   2   0   0   0   0   0  > 6  0   >151  0
    *  PRIOR 30JUN77    2 *    >  0   0  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  0   > 51  1
    *  AFTER 30JUN77    0 *              OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  2   >  0  0

CDC CYB73     4    0    3    0 >528   3  RES    3   1   0   0   0   0   1   1   0   1   0  >12  0   >301  4   DSK  5     2      6
    **********************     >352   0  ADM    5   2   0   0   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  3
    * INSTALLED:           *   >176   0  INS    2   1   2   1   0   0   0   0   0   0   1  > 6  0   >151  0
    *  PRIOR 30JUN77    5 *    >  0   2  H.ED   6   0   0   0   1   0   0   0   0   0   0  > 3  2   > 51  0
    *  AFTER 30JUN77    2 *              OTH    5   1   0   1   0   0   0   0   0   0   0  > 0  2   >  0  1

CDC CYB74     1    0    5    0 >528   3  RES    1   0   1   1   0   0   1   1   0   1   0  >12  0   >301  4   DSK  5     4      5
    **********************     >352   2  ADM    4   2   0   0   0   0   0   0   0   0   0  > 9  1   >251  0   OTH  1
    * INSTALLED:           *   >176   0  INS    1   2   1   1   0   0   0   0   1   0   0  > 6  3   >151  0
    *  PRIOR 30JUN77    5 *    >  0   1  H.ED   5   0   0   0   1   0   0   0   0   0   0  > 3  1   > 51  2
    *  AFTER 30JUN77    1 *              OTH    5   0   0   1   0   0   0   0   0   0   0  > 0  1   >  0  0

CDC G-15      0    0    0    1 >528   0  RES    0   0   0   0   0   0   0   0   0   0   1  >12  0   >301  0   DSK  0     0      0
    **********************     >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  1
    * INSTALLED:           *   >176   0  INS    0   1   0   0   0   0   0   0   0   0   0  > 6  0   >151  0
    *  PRIOR 30JUN77    1 *    >  0   1  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  1   > 51  0
    *  AFTER 30JUN77    0 *              OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0   >  0  0

CDC G-20      0    0    1    1 >528   0  RES    0   0   0   0   0   0   0   0   2   0   0  >12  0   >301  0   DSK  0     2      0
    **********************     >352   0  ADM    2   0   0   0   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  0
    * INSTALLED:           *   >176   2  INS    0   0   0   2   0   0   0   0   0   0   0  > 6  0   >151  0
    *  PRIOR 30JUN77    2 *    >  0   0  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  2   > 51  2
    *  AFTER 30JUN77    0 *              OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  0   >  0  0

CDC LGP30     0    0    1    0 >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0   >301  0   DSK  0     1      0
    **********************     >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  0
    * INSTALLED:           *   >176   1  INS    0   0   0   0   0   0   0   0   0   0   1  > 6  0   >151  0
    *  PRIOR 30JUN77    1 *    >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0   > 51  0
    *  AFTER 30JUN77    0 *              OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0   >  0  1

CDC 160A      0    0    0    1 >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0   >301  0   DSK  0     1      0
    **********************     >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  0
    * INSTALLED:           *   >176   1  INS    0   0   0   0   0   0   0   0   0   0   1  > 6  0   >151  0
    *  PRIOR 30JUN77    1 *    >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0   > 51  0
    *  AFTER 30JUN77    0 *              OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0   >  0  1

CDC 1604      0    0    0    0 >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0   >301  0   DSK  0     0      0
    **********************     >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  0
    * INSTALLED:           *   >176   0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0   >151  0
    *  PRIOR 30JUN77    1 *    >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0   > 51  0
    *  AFTER 30JUN77    0 *              OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0   >  0  0

CDC 1604A     0    0    0    1 >528   1  RES    0   0   0   0   0   0   0   0   0   1   0  >12  0   >301  0   DSK  0     1      0
    **********************     >352   0  ADM    0   1   0   0   0   0   0   0   0   0   0  > 9  0   >251  1   OTH  0
    * INSTALLED:           *   >176   0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0   >151  0
    *  PRIOR 30JUN77    1 *    >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  1   > 51  0
    *  AFTER 30JUN77    0 *              OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0   >  0  0

CDC 1700      0    0    1    2 >528   2  RES    0   0   0   0   0   0   0   1   2   0   0  >12  0   >301  0   DSK  3     0      3
    **********************     >352   1  ADM    2   0   1   0   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  0
    * INSTALLED:           *   >176   0  INS    0   0   1   2   0   0   0   0   0   0   0  > 6  0   >151  2
    *  PRIOR 30JUN77    3 *    >  0   0  H.ED   3   0   0   0   0   0   0   0   0   0   0  > 3  1   > 51  1
    *  AFTER 30JUN77    0 *              OTH    3   0   0   0   0   0   0   0   0   0   0  > 0  0   >  0  0
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                                          SUMMARY OF COMPUTERS

     GROUP I

     MODEL  NUMBER   NUMBER  AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER  CORE CAP   ADDL     COMM PORTS
            LEASED PURCHASED   AVG      ****                  PERCENT                  *  TAPE    THOUSAND STORAGE  ***********
MFG  NO.                                TYPE N/O  10  20  30  40  50  60  70  80  90 100  DRIVES  OF CHARS  TYPE NO    BTCH  INTRACT
           MFG H-CO MFG OTHR  HRS   NO

CDC 1700       0   1   0   0  >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  1       0        0
    ************************  >352   0  ADM    0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251   0  OTH  0
    * INSTALLED:           *  >176   0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77     1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
    *  AFTER 30JUN77     0 *            OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

CDC 1805       1   0   0   0  >528   0  RES    0   0   0   0   0   0   0   1   0   0   0  >12  0  >301   0  DSK  0       1        0
    ************************  >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:           *  >176   1  INS    0   0   0   1   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77     1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *            OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

CDC 1830TS     0   0   1   0  >528   1  RES    0   0   0   0   0   0   0   0   0   1   0  >12  0  >301   0  DSK  0       0        0
    ************************  >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:           *  >176   0  INS    0   1   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77     1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
    *  AFTER 30JUN77     0 *            OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

CDC 200        0   0   1   0  >528   0  RES    2   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0       1        0
    ************************  >352   0  ADM    1   1   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  CTH  0
    * INSTALLED:           *  >176   1  INS    0   0   0   0   0   0   0   0   0   0   2  > 6  0  >151   0
    *  PRIOR 30JUN77     2 *  >  0   0  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *            OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

CDC 3100       2   0   0   1  >528   1  RES    1   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  2       1        0
    ************************  >352   0  ADM    0   0   0   0   1   0   0   1   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:           *  >176   1  INS    0   0   0   1   0   1   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77     2 *  >  0   0  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   2
    *  AFTER 30JUN77     0 *            OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

CDC 3150       6   0   0   0  >528   5  RES    3   2   1   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  6       4        1
    ************************  >352   1  ADM    0   0   0   0   1   4   1   0   0   0   0  > 9  0  >251   2  OTH  0
    * INSTALLED:           *  >176   0  INS    0   0   0   0   3   3   0   0   0   0   0  > 6  0  >151   2
    *  PRIOR 30JUN77     6 *  >  0   0  H.ED   6   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   0
    *  AFTER 30JUN77     0 *            OTH    6   0   0   0   0   0   0   0   0   0   0  > 0  5  >  0   2

CDC 3200       1   0   3   0  >528   0  RES    0   1   1   0   0   0   1   1   0   0   0  >12  0  >301   0  DSK  4       1        1
    ************************  >352   1  ADM    2   0   1   0   0   0   0   0   1   0   0  > 9  0  >251   1  OTH  0
    * INSTALLED:           *  >176   3  INS    0   3   0   0   0   0   0   1   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77     4 *  >  0   0  H.ED   4   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   3
    *  AFTER 30JUN77     0 *            OTH    3   0   0   1   0   0   0   0   0   0   0  > 0  3  >  0   0

CDC 3300       4   0   3   0  >528   3  RES    4   0   0   0   0   1   0   1   0   0   0  >12  0  >301   1  DSK  5       2        1
    ************************  >352   0  ADM    1   0   1   0   1   2   0   0   1   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:           *  >176   1  INS    2   1   1   0   0   2   0   0   0   0   0  > 6  2  >151   2
    *  PRIOR 30JUN77     6 *  >  0   1  H.ED   6   0   0   0   0   0   0   0   0   0   0  > 3  2  > 51   1
    *  AFTER 30JUN77     0 *            OTH    5   1   0   0   0   0   0   0   0   0   0  > 0  1  >  0   1

CDC 3400       0   0   1   0  >528   1  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  1       1        0
    ************************  >352   0  ADM    0   0   0   0   0   1   0   0   0   0   0  > 9  0  >251   1  CTH  0
    * INSTALLED:           *  >176   0  INS    0   0   0   0   0   1   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77     1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *            OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

CDC 3600       0   0   1   0  >528   1  RES    0   0   0   0   0   0   0   0   0   0   1  >12  1  >301   0  DSK  0       1        0
    ************************  >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:           *  >176   0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   1
    *  PRIOR 30JUN77     1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *            OTH    0   1   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

CDC 6400       5   0   9   2  >528   7  RES    9   2   3   0   1   0   0   0   0   0   0  >12  0  >301  12  DSK 11       9        7
    ************************  >352   3  ADM    9   3   0   0   1   1   0   1   0   0   0  > 9  1  >251   0  OTH  4
    * INSTALLED:           *  >176   1  INS    7   0   1   1   1   1   0   1   2   1   0  > 6  0  >151   0
    *  PRIOR 30JUN77    13 *  >  0   2  H.ED.12   1   0   0   0   0   0   0   0   1   1  > 3  6  > 51   1
    *  AFTER 30JUN77     2 *            OTH   12   2   0   1   0   0   0   0   0   0   0  > 0  5  >  0   0

CDC 6500       0   0   1   0  >528   1  RES    0   1   0   0   0   0   0   0   1   0   0  >12  0  >301   1  DSK  1       1        1
    ************************  >352   0  ADM    1   1   0   0   0   0   0   0   0   0   0  > 9  1  >251   0  OTH  1
    * INSTALLED:           *  >176   0  INS    0   0   2   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77     2 *  >  0   0  H.ED   1   0   0   0   1   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *            OTH    1   0   0   1   0   0   0   0   0   0   0  > 0  0  >  0   0

CDC 6513       0   0   0   1  >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   1  DSK  1       0        0
    ************************  >352   1  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  1
    * INSTALLED:           *  >176   0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77     1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *            OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

CDC 6514       0   0   1   0  >528   0  RES    0   0   0   0   0   0   0   1   0   0   0  >12  0  >301   1  DSK  1       1        1
    ************************  >352   1  ADM    0   1   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  CTH  1
    * INSTALLED:           *  >176   0  INS    0   0   1   0   0   0   0   0   0   0   0  > 6  1  >151   0
    *  PRIOR 30JUN77     1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *            OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0
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                                                        SUMMARY OF COMPUTERS
     GROUP (                                       )

      MODEL     NUMBER    NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER   CORE CAP  ADDL        COMM PORTS
MFG   NO.       LEASED  PURCHASED    AVG    ****                  PERCENT                *  TAPE     THOUSAND  STORAGE     ***********
             MFG H-CO  MFG OTHR HRS     NO  TYPE N/O  10  20  30  40  50  60  70  80 90 100  DRIVES   OF CHARS  TYPE NO    BTCH INTRACT

CDC 6600      0    0    2    0 >528   1  RES    0   0   0   0   0   1   0   0   0  1   0  >12  0  >301   2  DSK   2     2       2
     ************************  >352   1  ADM    2   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH   1
     * INSTALLED:           *  >176   0  INS    0   1   0   1   0   0   0   0   0  0   0  > 6  1  >151   0
     *  PRIOR 30JUN77    1  *  >  0   0  H.ED   2   0   0   0   0   0   0   0   0  0   0  > 3  1  > 51   0
     *  AFTER 30JUN77    1  *            OTH    1   0   1   0   0   0   0   0   0  0   0  > 0  0  >  0   0

CHI 2130      1    0    0    0 >528   0  RES    0   1   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK   1     1       0
     ************************  >352   0  ADM    0   0   0   0   0   0   0   0   1  0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:           *  >176   0  INS    0   0   1   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77    1  *  >  0   1  H.ED   1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77    0  *            OTH    1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   1

COM KIM       0    0    0    0 >528   0  RES    0   0   0   1   0   0   0   0   0  0   0  >12  0  >301   0  DSK   0     0       0
     ************************  >352   0  ADM    1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:           *  >176   1  INS    0   0   0   0   0   0   0   1   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77    1  *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77    0  *            OTH    1   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   1

DAG           0    0    1    0 >528   0  RES    0   0   0   0   0   0   0   0   0  1   0  >12  0  >301   0  DSK   0     0       0
     ************************  >352   0  ADM    1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:           *  >176   0  INS    0   1   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77    1  *  >  0   1  H.ED   1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77    0  *            OTH    1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   1

DAG ALPHA     0    0    1    0 >528   0  RES    0   0   0   0   0   0   0   0   0  1   0  >12  0  >301   0  DSK   0     0       0
     ************************  >352   0  ADM    1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:           *  >176   0  INS    0   0   1   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77    1  *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77    0  *            OTH    1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

DAG C/300     0    0    2    2 >528   0  RES    4   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK   4     4       4
     ************************  >352   1  ADM    0   1   0   0   0   0   0   2   1  0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:           *  >176   2  INS    0   0   1   2   0   0   0   0   0  1   0  > 6  0  >151   2
     *  PRIOR 30JUN77    4  *  >  0   1  H.ED   4   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   2
     *  AFTER 30JUN77    0  *            OTH    3   1   0   0   0   0   0   0   0  0   0  > 0  4  >  0   0

DAG E/230     0    1    0    0 >528   0  RES    1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK   1     0       1
     ************************  >352   0  ADM    1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:           *  >176   0  INS    1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77    0  *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   1
     *  AFTER 30JUN77    1  *            OTH    1   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   0

DAG ECLIPSE   0    0    5    0 >528   1  RES    5   0   0   0   0   0   1   0   0  0   0  >12  0  >301   0  DSK   1     0       1
     ************************  >352   0  ADM    6   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:           *  >176   0  INS    5   0   0   0   1   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77    6  *  >  0   0  H.ED   6   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   1
     *  AFTER 30JUN77    0  *            OTH    6   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

DAG NOVA      1    1   19    5 >528   7  RES   18   0   1   0   0   0   0   1   1  0  11  >12  0  >301   0  DSK   5     1       6
     ************************  >352   0  ADM   29   0   0   0   0   0   0   0   0  1   2  > 9  0  >251   0  OTH   1
     * INSTALLED:           *  >176   5  INS   24   2   0   1   1   0   0   0   1  0   3  > 6  0  >151   0
     *  PRIOR 30JUN77   31  *  >  0   0  H.ED  32   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77    1  *            OTH   32   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0  11

DAG NOVA1     0    0    0    1 >528   0  RES    1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK   0     1       0
     ************************  >352   0  ADM    1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:           *  >176   0  INS    1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77    1  *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77    0  *            OTH    1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   1

DAG NOVA2     0    0   15    5 >528   6  RES   12   2   1   1   1   2   0   0   1  0   9  >12  0  >301   1  DSK   7     6      12
     ************************  >352   8  ADM   26   2   0   0   0   0   0   0   0  0   1  > 9  0  >251   0  OTH   3
     * INSTALLED:           *  >176   3  INS   20   0   0   1   2   0   1   0   2  0   3  > 6  0  >151   3
     *  PRIOR 30JUN77   29  *  >  0   1  H.ED  29   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   4
     *  AFTER 30JUN77    0  *            OTH   29   0   0   0   0   0   0   0   0  0   0  > 0  8  >  0  11

DAG NOVA3     0    1    7    4 >528   2  RES   11   0   1   0   0   0   0   0   0  1   2  >12  0  >301   0  DSK   6     3       5
     ************************  >352   0  ADM   13   0   0   0   0   1   0   0   0  0   1  > 9  0  >251   0  OTH   0
     * INSTALLED:           *  >176   5  INS    7   1   0   0   0   1   0   0   1  0   5  > 6  0  >151   0
     *  PRIOR 30JUN77   11  *  >  0   1  H.ED  15   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   4
     *  AFTER 30JUN77    4  *            OTH   15   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   5

DAG NOVA800   0    0   10    3 >528   0  RES    3   0   0   2   0   0   0   7   3  0   4  >12  0  >301   0  DSK  12     3       9
     ************************  >352   7  ADM   17   0   0   0   0   2   0   0   0  0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:           *  >176   3  INS    7   0   2  10   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   19  *  >  0   3  H.ED  19   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   2
     *  AFTER 30JUN77    0  *            OTH   19   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0  11

DAG NOVA820   0    0    1    0 >528   1  RES    1   0   0   0   0   0   0   0   0  0   1  >12  0  >301   0  DSK   0     0       0
     ************************  >352   0  ADM    2   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:           *  >176   0  INS    2   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77    2  *  >  0   0  H.ED   2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   1
     *  AFTER 30JUN77    0  *            OTH    2   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

SUMMARY OF COMPUTERS

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GROUP 1                                  1

    MODEL   NUMBER   NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER   CORE CAP    ADDL     COMM PORTS
MFG NO.     LEASED   PURCHASED  AVG     ****                PERCENT                  *   TAPE    THOUSAND   STORAGE   ***********
            MFG H-CO MFG OTHR  HRS   NO TYPE N/O  10  20  30  40  50  60  70  80  90 100  DRIVES   OF CHARS   TYPE NO  BTCH INTRACT

DAG NOVA840    1   0   2   0 >528  1  RES    4   0   1   0   0   0   1   0   0   0   0  >12  0  >301   0  DSK   3    2       2
    ************************ >352  0  ADM    6   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:          * >176  1  INS    4   0   0   0   1   0   0   0   0   1   0  > 6  0  >151   0
     *   PRIOR 30JUN77   6 * >  0  1  H.ED   6   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   2
     *   AFTER 30JUN77   0 *          OTH    6   0   0   0   0   0   0   0   0   0   0  > 0  2  >  0   1

DAG NOV1200    3   0   7  10 >528  9  RES    9   1   0   0   0   3   0   1   0   0   9  >12  0  >301   0  DSK  10    2       8
    ************************ >352  3  ADM   21   0   0   0   0   0   0   0   0   0   2  > 9  0  >251   0  OTH   1
     * INSTALLED:          * >176  1  INS   17   0   0   1   0   3   0   0   0   1   1  > 6  0  >151   0
     *   PRIOR 30JUN77  23 * >  0  2  H.ED  23   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   2
     *   AFTER 30JUN77   0 *          OTH   23   0   0   0   0   0   0   0   0   0   0  > 0  8  >  0  15

DAG NOV1210    0   0   1   1 >528  0  RES    1   0   0   0   0   0   1   0   0   0   0  >12  0  >301   0  DSK   1    0       0
    ************************ >352  0  ADM    2   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:          * >176  1  INS    0   0   0   0   1   0   0   0   0   0   1  > 6  0  >151   0
     *   PRIOR 30JUN77   2 * >  0  1  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *          OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   2

DAG NOV1220    0   1   5   2 >528  2  RES    6   1   0   1   0   0   1   0   0   0   1  >12  0  >301   0  DSK   4    3       6
    ************************ >352  0  ADM   10   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   1
     * INSTALLED:          * >176  2  INS    3   0   0   0   1   0   0   0   1   1   4  > 6  0  >151   0
     *   PRIOR 30JUN77  10 * >  0  3  H.ED  10   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
     *   AFTER 30JUN77   0 *          OTH   10   0   0   0   0   0   0   0   0   0   0  > 0  3  >  0   7

DAG S/200      0   0   2   0 >528  0  RES    2   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   2    1       2
    ************************ >352  0  ADM    3   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   1
     * INSTALLED:          * >176  2  INS    1   0   0   0   0   0   0   0   0   1   1  > 6  0  >151   0
     *   PRIOR 30JUN77   3 * >  0  0  H.ED   3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   2
     *   AFTER 30JUN77   0 *          OTH    3   0   0   0   0   0   0   0   0   0   0  > 0  2  >  0   0

DAG S/230      0   0   2   0 >528  0  RES    2   0   0   0   0   0   0   0   0   0   1  >12  0  >301   0  DSK   1    1       1
    ************************ >352  1  ADM    3   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:          * >176  0  INS    2   0   0   0   0   0   0   0   0   0   1  > 6  0  >151   0
     *   PRIOR 30JUN77   3 * >  0  0  H.ED   3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   2
     *   AFTER 30JUN77   0 *          OTH    3   0   0   0   0   0   0   0   0   0   0  > 0  2  >  0   0

DAG UT-1       0   0   0   0 >528  0  RES    0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0    0       0
    ************************ >352  0  ADM    0   1   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:          * >176  0  INS    0   0   0   0   0   0   0   0   0   1   0  > 6  0  >151   0
     *   PRIOR 30JUN77   1 * >  0  1  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *          OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

DAG 2000       0   0   0   0 >528  1  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0    0       0
    ************************ >352  0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:          * >176  0  INS    0   0   0   0   0   0   0   0   0   0   1  > 6  0  >151   0
     *   PRIOR 30JUN77   1 * >  0  0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *          OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

DAG 230        0   0   1   0 >528  1  RES    0   0   1   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1    0       1
    ************************ >352  0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:          * >176  0  INS    0   0   0   0   0   0   0   0   1   0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   1 * >  0  0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *          OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

DAG 4000       0   0   0   1 >528  1  RES    0   0   0   0   0   0   0   0   0   0   1  >12  0  >301   0  DSK   0    0       0
    ************************ >352  0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   1
     * INSTALLED:          * >176  0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   1 * >  0  0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *          OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   1

DAG 5200       0   0   1   0 >528  0  RES    0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1    1       1
    ************************ >352  0  ADM    0   0   0   1   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:          * >176  1  INS    0   0   0   1   0   0   0   0   0   0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   1 * >  0  0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
     *   AFTER 30JUN77   0 *          OTH    0   0   0   1   0   0   0   0   0   0   0  > 0  1  >  0   0

DAG 5230       0   0   1   1 >528  0  RES    0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1    1       1
    ************************ >352  0  ADM    0   0   1   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:          * >176  0  INS    0   0   0   0   0   0   0   0   1   0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   0 * >  0  0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
     *   AFTER 30JUN77   1 *          OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

DAG 8001       0   0   0   0 >528  0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0    0       0
    ************************ >352  0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:          * >176  0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   1 * >  0  0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *          OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

DAG 8352       0   0   1   0 >528  0  RES    0   0   0   0   0   0   0   0   0   0   1  >12  0  >301   0  DSK   0    0       0
    ************************ >352  0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
     * INSTALLED:          * >176  0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   1 * >  0  0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *          OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0
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                                                       SUMMARY OF COMPUTERS

    GROUP 1                                    )

    MODEL     NUMBER    NUMBER  AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER    CORE CAP  ADDL      COMM PORTS
MFG NO.       LEASED  PURCHASED    AVG    ****                  PERCENT                 *  TAPE    THOUSAND  STORAGE  ***********
             MFG H-CO  MFG OTHR  HRS    NO  TYPE N/O  10  20  30  40  50  60  70  80  90 100  DRIVES  OF CHARS  TYPE NO  BTCH INTRACT

DCC D-116      0    0    2    1  >528    0  RES    2   0   0   1   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     1       1
       ************************  >352    0  ADM    1   1   0   0   0   0   0   1   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    2  INS    1   0   0   0   0   0   0   0   0   1   1  > 6  0  >151   0
    *  PRIOR 30JUN77        3 *  >  0    1  H.ED   3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
    *  AFTER 30JUN77        0 *             OTH    3   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   2

DCD 70         0    0    0    0  >528    0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0       0
       ************************  >352    0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77        1 *  >  0    0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77        0 *             OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

DEC            0    0    1    0  >528    0  RES    8   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0       0
       ************************  >352    0  ADM    8   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    0  INS    7   0   0   0   0   0   0   0   0   0   1  > 6  0  >151   0
    *  PRIOR 30JUN77        8 *  >  0    0  H.ED   8   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77        0 *             OTH    8   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

DEC CLASSIC    1    0    2    0  >528    1  RES    2   0   0   0   0   0   0   0   0   0   1  >12  0  >301   0  DSK   1     0       2
       ************************  >352    0  ADM    3   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    1  INS    1   0   0   0   0   0   0   0   0   0   2  > 6  0  >151   0
    *  PRICR 30JUN77        3 *  >  0    1  H.ED   3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
    *  AFTER 30JUN77        0 *             OTH    3   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   2

DEC COM8001    0    0    0    0  >528    0  RES    2   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0       0
       ************************  >352    0  ADM    2   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    0  INS    2   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRICR 30JUN77        2 *  >  0    0  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77        0 *             OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

DEC GT40       0    0    3    0  >528    3  RES    1   0   0   1   0   0   0   0   0   0   1  >12  0  >301   0  DSK   0     0       1
       ************************  >352    0  ADM    3   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    0  INS    2   0   0   0   0   0   0   1   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77        3 *  >  0    0  H.ED   3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77        0 *             OTH    3   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

DEC GT44       0    0    1    0  >528    0  RES    0   0   0   0   0   0   0   0   1   0   0  >12  0  >301   0  DSK   1     0       0
       ************************  >352    1  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    0  INS    0   0   1   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77        1 *  >  0    0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77        0 *             OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   1

DEC GT46       0    0    1    0  >528    0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0       0
       ************************  >352    0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77        0 *  >  0    0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77        1 *             OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

DEC KA10       2    0    8    0  >528    7  RES    5   1   0   0   0   0   0   0   0   2   2  >12  0  >301   9  DSK  10     5      10
       ************************  >352    1  ADM    2   2   0   1   0   3   1   1   0   0   0  > 9  0  >251   0  OTH   1
    * INSTALLED:              *  >176    2  INS    4   0   1   1   1   3   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77       10 *  >  0    0  H.ED   9   1   0   0   0   0   0   0   0   0   0  > 3  1  > 51   1
    *  AFTER 30JUN77        0 *             OTH    8   1   0   0   0   1   0   0   0   0   0  > 0  8  >  0   0

DEC KI10       0    0    1    1  >528    1  RES    0   0   0   0   0   0   0   0   1   0   0  >12  0  >301   1  DSK   1     0       1
       ************************  >352    0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   1
    * INSTALLED:              *  >176    0  INS    0   0   1   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77        1 *  >  0    0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77        0 *             OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

DEC KL10       0    0    9    0  >528    9  RES    0   1   2   0   1   0   1   1   1   1   1  >12  0  >301   8  DSK   9     2       7
       ************************  >352    0  ADM    2   3   1   2   0   1   0   0   0   0   0  > 9  0  >251   1  OTH   0
    * INSTALLED:              *  >176    0  INS    3   1   1   0   1   3   0   0   0   0   0  > 6  1  >151   0
    *  PRIOR 30JUN77        9 *  >  0    0  H.ED   7   1   1   0   0   0   0   0   0   0   0  > 3  3  > 51   0
    *  AFTER 30JUN77        0 *             OTH    7   1   0   1   0   0   0   0   0   0   0  > 0  5  >  0   0

DEC LA36       0    0    0    1  >528    0  RES    0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0       1
       ************************  >352    0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    0  INS    0   0   0   0   0   0   0   0   0   1   0  > 6  0  >151   0
    *  PRIOR 30JUN77        1 *  >  0    1  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77        0 *             OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

DEC LINC       0    0    2    0  >528    0  RES    0   0   0   0   0   0   0   0   0   0   2  >12  0  >301   0  DSK   0     2       2
       ************************  >352    2  ADM    2   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    0  INS    2   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRICR 30JUN77        2 *  >  0    0  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77        0 *             OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  2  >  0   2

DEC LINC/8     0    0    3    0  >528    3  RES    4   0   0   0   0   0   0   0   0   0   3  >12  0  >301   0  DSK   0     0       3
       ************************  >352    0  ADM    7   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   1
    * INSTALLED:              *  >176    0  INS    7   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRICR 30JUN77        7 *  >  0    0  H.ED   7   0   0   0   0   0   0   0   0   0   0  > 3  2  > 51   0
    *  AFTER 30JUN77        0 *             OTH    7   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   3
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SUMMARY OF COMPUTERS

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  GROUP (                           )
     MODEL    NUMBER    NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER   CORE CAP   ADDL      COMM PORTS
                                          ****                 PERCENT                  *   TAPE     THOUSAND   STORAGE   ***********
MFG  NO.      LEASED   PURCHASED   AVG    TYPE N/O 10  20  30  40  50  60  70  80 90 100   DRIVES   OF CHARS   TYPE NO   BTCH INTRACT
             MFG H-CC MFG OTHR HRS   NO

DEC LSI11     0    0  33   1 >528   3  RES  16   1   0   0   0   0   0   0   0  0  17   >12  0   >301   0   DSK   7     3      12
    ************************ >352   8  ADM  34   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH   0     ,
    * INSTALLED:           * >176   1  INS  17   0   0   0   0   0   0   0   0  0  17   > 6  0   >151   0
    *  PRIOR 30JUN77   34 *  >  0   0  H.ED 34   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   3
    *  AFTER 30JUN77    0 *            OTH  34   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   9

DEC_PCP1140   0    0   1   0 >528   0  RES   0   0   0   0   0   0   0   0   0  0   1   >12  0   >301   0   DSK   1     0       1
    ************************ >352   1  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH   0
    * INSTALLED:           * >176   0  INS   1   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77    1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   1
    *  AFTER 30JUN77    0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  1   >  0   0

DEC PDP1040   0    0   2   0 >528   2  RES   0   0   0   1   0   1   0   0   0  0   0   >12  0   >301   2   DSK   2     0       2
    ************************ >352   0  ADM   1   0   1   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH   0     ,
    * INSTALLED:           * >176   0  INS   0   0   0   1   0   1   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77    2 *  >  0   0  H.ED  2   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77    0 *            OTH   0   1   1   0   0   0   0   0   0  0   0   > 0  2   >  0   0

DEC PDP1050   1    0   1   0 >528   2  RES   1   1   0   1   0   0   0   0   0  0   0   >12  0   >301   3   DSK   3     0       3
    ************************ >352   0  ADM   2   0   0   1   0   0   0   0   0  0   0   > 9  0   >251   0   OTH   0
    * INSTALLED:           * >176   0  INS   1   0   0   0   1   0   0   0   1  0.  0   > 6  0   >151   0
    *  PRIOR 30JUN77    2 *  >  0   0  H.ED  3   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77    1 *            OTH   2   1   0   0   0   0   0   0   0  0   0   > 0  3   >  0   0

DEC PDP1055   0    0   1   0 >528   0  RES   1   0   0   0   0   0   0   0   0. 0   0   >12  0   >301   1   DSK   1     1       1
    ************************ >352   1  ADM   0   0   0   0   0   1   0   0   0  0   0   > 9  0   >251   0   OTH   0
    * INSTALLED:           * >176   0  INS   0   0   0 [illegible] 0 1 0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77    1 *  >  0   0  H.ED  1   0   0 [illegible] 0 0 0   0   0  0   0   > 3  1   > 51   0
    *  AFTER 30JUN77    0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   0

DEC PDP1060   0    0   3   2 >528   3  RES   0   2   0   0   0   0   0   0   0  1   0   >12  0   >301   3   DSK   3     1       3
    ************************ >352   0  ADM   0   1   0   0  .0   1   0   1   0  0   0   > 9  0   >251   0   OTH   0
    * INSTALLED:           * >176   0  INS   1   0   0   1   0   1   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77    3 *  >  0   0  H.ED  3   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77    0 *            OTH   3   0   0   0   0   0   0   0   0  0   0   > 0  3   >  0   0

DEC PDP1070   0    0   1   0 >528   1  RES   0   0   0   0   0   0   0   1   0  0   0   >12  0   >301   1   DSK   1     1       1
    ************************ >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9. 0   >251   0   OTH   0
    * INSTALLED:           * >176   0  INS   0  .0   1   0   0   0   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77    1 *  >  0   0  H.ED  0   1   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77    0 *            OTH   0   1   0   0   0   0   0   0   0  0   0   > 0  1   >  0   0

DEC PDP1077   0    0   1   0 >528   1  RES   0   0   0   0   0   0   1   0   0  0   0   >12  0   >301   1   DSK   1     1       1
    ************************ >352   0  ADM   0   0   0   1   0   0   0   0   0  0   0   > 9  0   >251   0   OTH   1
    * INSTALLED:           * >176   0  INS   0   0   1   0   0   0   0   0   0  0   0   > 6  0   >151   0
    *  PRICR 30JUN77    1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  1   > 51   0
    *  AFTER 30JUN77    0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   0

DEC PDP1080   0    0   3   0 >528   2  RES   1   0   1   1   0   0   0   0   0  0   0   >12  0   >301   3   DSK   3     2       3
    ************************ >352   1  ADM   0   0   1   0   0   2   0   0   0  0   0   > 9  0   >251   0   OTH   1
    * INSTALLED:           * >176   0  INS   0   0   1   0   0   2   0   0   0  0   0   > 6  1   >151   0
    *  PRICR 30JUN77    3 *  >  0   0  H.ED  2   0   1   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77    0 *            OTH   3   0   0   0   0   0   0   0   0  0   0   > 0  2   >  0   0

DEC PDP1090   0    0   2   0 >528   1  RES   1   0   0   0   0   1   0   0   0  0   0   >12  0   >301   2   DSK   2     0       2
    ************************ >352   0  ADM   1   1   0   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH   0
    * INSTALLED:           * >176   0  INS   1   0   0   0   1   0   0   0   0  0   0   > 6  0   >151   0
    *  PRICR 30JUN77    1 *  >  0   0  H.ED  2   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77    1 *            OTH   1   1   0   0   0   0   0   0   0  0   0   > 0  1   >  0   0

DEC PDP11     0    4  38   5 >528  22  RES  74   7   2   2   0   2   0   0   2  1  30   >12  0   >301   0   DSK  25    11      26
    ************************ >352   1  ADM 108   4   0   3   0   3   1   0   0  0   1   > 9  0   >251   1   OTH   1
    * INSTALLED:           * >176   6  INS  94   2   0   2   1   6   1   1   1  5   7   > 6  0   >151   6
    *  PRIOR 30JUN77  117 *  >  0   6  H.ED120   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51  10
    *  AFTER 30JUN77    3 *            OTH 120   0   0   0   0   0  .0   0   0  0   0   > 0 14   >  0  13

DEC PDP1103   1    0   7  .0 >528   2  RES  16   1   0   0   0   1   0   0   0  1   1   >12  0   >301   0   DSK   5     0       6
    ************************ >352   2  ADM  19   0   0   0   1   0   0   0   0  0   0   > 9  0   >251   0   OTH   0
    * INSTALLED:           * >176   1  INS  13   1   0   0   0   1   1   0   0  0   4   > 6  0   >151   0
    *  PRIOR 30JUN77   17 *  >  0   1  H.ED 20   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   1
    *  AFTER 30JUN77    3 *            OTH  20   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   6

DEC PDP1104   0    0   0   0 >528   0  RES   4   0   0   0   0   0   0   0   0  0   0   >12  0   >301   0   DSK   0     0       0
    ************************ >352   0  ADM   4   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH   0
    * INSTALLED:           * >176   0  INS   4   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77    4 *  >  0   0  H.ED  4   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77    0 *            OTH   4   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   0

DEC PDP1105   0    0   5   6 >528   4  RES   8   0   0   0   2   0   0   0   2  0   2   >12  0   >301   0   DSK   4     0       6
    ************************ >352   1  ADM  14   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH   0
    * INSTALLED:           * >176   0  INS   8   0   0   2   0   0   2   0   0  0   2   > 6  0   >151   0
    *  PRIOR 30JUN77   13 *  >  0   3  H.ED 14   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   4
    *  AFTER 30JUN77    1 *            OTH  14   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   4
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                                                   SUMMARY OF COMPUTERS
      GROUP (                                 )

     MODEL    NUMBER   NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER    CORE CAP   ADDL      COMM PORTS
MFG  NO.      LEASED  PURCHASED   AVG    ****                  PERCENT                 *  TAPE      THOUSAND   STORAGE   **********
             MFG H-CO MFG OTHR HRS   NO  TYPE N/O 10  20  30  40  50  60  70  80 90 100   DRIVES    OF CHARS   TYPE NO   BTCH INTRACT

DEC PDP1110  0    1  18    0  >528    4  RES  19   0   5   0   0   0   0   0   0  2   6  >12  0    >301   0  DSK   9     2      12
    **********************    >352    1  ADM  31   0   0   0   0   0   0   0   0  0   1  > 9  0    >251   0  OTH   0
    * INSTALLED:           *  >176    5  INS  20   1   1   0   0   0   0   0   5  0   5  > 6  0    >151   0
    *  PRIOR 30JUN77    32 *  >  0    2  H.ED 32   0   0   0   0   0   0   0   0  0   0  > 3  0    > 51   2
    *  AFTER 30JUN77     0 *             OTH  32   0   0   0   0   0   0   0   0  0   0  > 0  3    >  0  12

DEC PDP1115  0    0   1    0  >528    1  RES   1   0   0   0   0   0   0   1   0  0   0  >12  0    >301   0  DSK   1     0       1
    **********************    >352    0  ADM   1   0   0   1   0   0   0   0   0  0   0  > 9  0    >251   0  OTH   0
    * INSTALLED:           *  >176    0  INS   2   0   0   0   0   0   0   0   0  0   0  > 6  0    >151   0
    *  PRIOR 30JUN77     2 *  >  0    0  H.ED  2   0   0   0   0   0   0   0   0  0   0  > 3  0    > 51   0
    *  AFTER 30JUN77     0 *             OTH   2   0   0   0   0   0   0   0   0  0   0  > 0  0    >  0   1

DEC PDP1120  1    0  28    4  >528    9  RES  27   2   0   1   1   1   2   0   1  0  10  >12  0    >301   0  DSK   7     3,     12
    **********************    >352    2  ADM  43   1   0   0   1   0   0   0   0  0   0  > 9  0    >251   0  OTH   2
    * INSTALLED:           *  >176    8  INS  33   2   1   0   1   1   0   1   0  1   5  > 6  0    >151   0
    *  PRIOR 30JUN77    45 *  >  0    4  H.ED 45   0   0   0   0   0   0   0   0  0   0  > 3  0    > 51  10
    *  AFTER 30JUN77     0 *             OTH  43   1   1   0   0   0   0   0   0  0   0  > 0  8    >  0  14

DEC PDP1125  0    0   1    0  >528    1  RES   0   0   0   0   0   0   0   0   0  0   1  >12  0    >301   0  DSK   1     0       0
    **********************    >352    0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0    >251   0  OTH   0
    * INSTALLED:           *  >176    0  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0    >151   0
    *  PRIOR 30JUN77     1 *  >  0    0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0    > 51   0
    *  AFTER 30JUN77     0 *             OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0    >  0   1

DEC PDP1134  1    2  33    2  >528   11  RES  42   4   2   0   0   0   0   2   0  0   7  >12  0    >301   1  DSK  31     7      31
    **********************    >352    4  ADM  49   0   0   1   0   1   2   1   1  0   2  > 9  0    >251   0  CTH   5
    * INSTALLED:           *  >176   10  INS  34   0   2   2   2   1   1   0   2  1  12  > 6  0    >151   9
    *  PRIOR 30JUN77    50 *  >  0    5  H.ED 57   0   0   0   0   0   0   0   0  0   0  > 3  0    > 51  16
    *  AFTER 30JUN77     7 *             OTH  55   2   0   0   0   0   0   0   0  0   0  > 0 12    >  0  10

DEC PDP1135  0    0   2    1  >528    1  RES   1   0   1   0   0   0   0   0   0  0   1  >12  0    >301   0  DSK   2     0       2
    **********************    >352    0  ADM   3   0   0   0   0   0   0   0   0  0   0  > 9  0    >251   0  OTH   0
    * INSTALLED:           *  >176    1  INS   1   0   0   0   0   0   0   1   0  1   1  > 6  0    >151   1
    *  PRIOR 30JUN77     3 *  >  0    0  H.ED  3   0   0   0   0   0   0   0   0  0   0  > 3  0    > 51   1
    *  AFTER 30JUN77     0 *             OTH   3   0   0   0   0   0   0   0   0  0   0  > 0  2    >  0   0

DEC PDP1140  5    2  47    8  >528   29  RES  35  15   3   1   2   2   0   1   1  2  11  >12  0    >301   0  DSK  51    13      93
    **********************    >352    6  ADM  38   4   3   1   3   5   4   2   5  3   5  > 9  0    >251   8  OTH   3
    * INSTALLED:           *  >176   19  INS  31   6   4   5   7   3   3   2   3  3   6  > 6  0    >151   7
    *  PRIOR 30JUN77    72 *  >  0    5  H.ED 72   1   0   0   0   0   0   0   0  0   0  > 3  0    > 51  31
    *  AFTER 30JUN77     1 *             OTH  73   0   0   0   0   0   0   0   0  0   0  > 0 30    >  0  13

DEC PDP1145  0    2  35    5  >528   26  RES  23   8   1   3   0   1   0   4   0  0   7  >12  0    >301   1  DSK  32    11      33
    **********************    >352    4  ADM  33   1   1   1   1   5   1   1   2  1   0  > 9  0    >251   4  OTH   0
    * INSTALLED:           *  >176    5  INS  19   1   4   2   2   6   0   0   2  2   9  > 6  0    >151  11
    *  PRIOR 30JUN77    47 *  >  0    3  H.ED 46   1   0   0   0   0   0   0   0  0   0  > 3  1    > 51  19
    *  AFTER 30JUN77     0 *             OTH  43   1   2   0   0   1   0   0   0  0   0  > 0 26    >  0   1

DEC PDP1150  0    0   4    0  >528    3  RES   2   2   0   0   0   0   0   0   1  0   0  >12  0    >301   0  DSK   3     1       4
    **********************    >352    0  ADM   3   0   1   0   0   0   1   0   C  0   0  > 9  0    >251   1  OTH   2
    * INSTALLED:           *  >176    1  INS   1   0   0   1   1   0   0   1   0  0   1  > 6  0    >151   1
    *  PRIOR 30JUN77     5 *  >  0    0  H.ED  5   0   0   0   0   0   0   0   0  0   0  > 3  0    > 51   1
    *  AFTER 30JUN77     0 *             OTH   5   0   0   0   0   0   0   0   0  0   0  > 0  3    >  0   0

DEC PDP1155  0    0   3    2  >528    3  RES   1   1   1   0   0   0   0   0   0  0   1  >12  0    >301   0  DSK   3     0       2
    **********************    >352    0  ADM   3   0   0   0   0   1   0   0   0  0   0  > 9  0    >251   0  OTH   0
    * INSTALLED:           *  >176    0  INS   2   0   0   0   0   1   0   0   1  0   0  > 6  0    >151   1
    *  PRIOR 30JUN77     4 *  >  0    0  H.ED  4   0   0   0   0   0   0   0   0  0   0  > 3  0    > 51   1
    *  AFTER 30JUN77     0 *             OTH   4   0   0   0   0   0   0   0   0  0   0  > 0  3    >  0   1

DEC PDP1160  0    0   5    1  >528    2  RES   2   1   1   1   0   0   0   0   1  0   0  >12  0    >301   0  DSK   6     1       5
    **********************    >352    1  ADM   6   0   0   0   0   0   0   0   0  0   0  > 9  0    >251   3  OTH   0
    * INSTALLED:           *  >176    0  INS   2   0   0   1   0   0   0   0   2  1   0  > 6  0    >151   0
    *  PRIOR 30JUN77     2 *  >  0    0  H.ED  6   0   0   0   0   0   0   0   0  0   0  > 3  0    > 51   2
    *  AFTER 30JUN77     4 *             OTH   6   0   0   0   0   0   0   0   0  0   0  > 0  4    >  0   1

DEC PDP1170  3    1  33    4  >528   18  RES  20  13   1   1   0   0   0   0   0  0   4  >12  0    >301   8  DSK  36    10      32
    **********************    >352    6  ADM  18   4   3   3   1   5   2   0   1  0   2  > 9  0    >251  15  OTH   3
    * INSTALLED:           *  >176    7  INS  13   0   1   1   3   5   3   1   3  3   6  > 6  0    >151   8
    *  PRIOR 30JUN77    31 *  >  0    1  H.ED 36   2   0   0   0   1   0   0   0  0   0  > 3  2    > 51   5
    *  AFTER 30JUN77     8 *             OTH  34   3   1   0   0   1   0   0   0  0   0  > 0 31    >  0   0

DEC PDP12    0    0  15    1  >528    7  RES  21   1   0   0   0   1   1   0   2  0   9  >12  0    >301   0  DSK   8     1      10
    **********************    >352    4  ADM  29   3   0   0   0   0   0   0   0  0   3  > 9  0    >251   0  OTH   2
    * INSTALLED:           *  >176    0  INS  30   2   0   1   0   1   0   0   0  1   0  > 6  0    >151   0
    *  PRIOR 30JUN77    35 *  >  0    1  H.ED 33   2   0   0   0   0   0   0   0  0   0  > 3  4    > 51   0
    *  AFTER 30JUN77     0 *             OTH  35   0   0   0   0   0   0   0   0  0   0  > 0  6    >  0  12

DEC PDP12A   0    0   0    1  >528    0  RES   0   0   0   0   0   0   0   0   0  0   1  >12  0    >301   0  DSK   1     0       0
    **********************    >352    0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0    >251   0  OTH   0
    * INSTALLED:           *  >176    0  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0    >151   0
    *  PRIOR 30JUN77     1 *  >  0    1  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0    > 51   0
    *  AFTER 30JUN77     0 *             OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1    >  0   1
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA                      PAGE VII-13
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                              SUMMARY OF COMPUTERS
     GROUP (                                 )

     MODEL    NUMBER   NUMBER    AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER   CORE CAP   ADDL      COMM PORTS
MFG  NO.      LEASED  PURCHASED    AVG    ****                 PERCENT                  *  TAPE     THOUSAND   STORAGE   ************
             MFG H-CO MFG OTHR  HRS    NO  TYPE N/O 10  20  30  40  50  60  70  80 90 100  DRIVES   OF CHARS   TYPE NO   BTCH INTRACT

DEC PDP12C    0   0   1   0  >528   0  RES    0   0   0   0   0   0   0   0   1  0   0  >12  0  >301   0  DSK  0      0      1
     **********************  >352   0  ADM    1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   1  INS    0   0   0   1   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   0 *            OTH    1   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   1

DEC PDP14     0   0   1   0  >528   0  RES    0   0   0   0   0   0   0   0   0  0   1  >12  0  >301   0  DSK  0      0      0
     **********************  >352   0  ADM    1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS    1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   1 *  >  0   1  H.ED   1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   0 *            OTH    1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

DEC PDP15     0   1  11   0  >528   8  RES    8   1   0   0   0   1   0   0   0  1   6  >12  0  >301   0  DSK  6      2      7
     **********************  >352   0  ADM   14   0   0   1   0   0   0   0   0  1   1  > 9  0  >251   0  OTH  3
     * INSTALLED:         *  >176   0  INS   15   1   1   0   0   0   0   0   0  0   0  > 6  1  >151   0
     *  PRIOR 30JUN77  17 *  >  0   0  H.ED  17   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   7
     *  AFTER 30JUN77   0 *            OTH   17   0   0   0   0   0   0   0   0  0   0  > 0  4  >  0   1

DEC PDP1520   0   0   1   0  >528   1  RES    0   0   0   0   0   0   0   0   0  0   1  >12  0  >301   0  DSK  0      0      1
     **********************  >352   0  ADM    1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS    1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   0 *            OTH    1   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   1

DEC PDP1530   0   0   1   0  >528   1  RES    0   0   0   0   0   0   0   0   0  0   1  >12  0  >301   0  DSK  0      0      1
     **********************  >352   0  ADM    1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  1
     * INSTALLED:         *  >176   0  INS    1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0  0   0  > 3  1  > 51   1
     *  AFTER 30JUN77   0 *            OTH    1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

DEC PDP1575   0   0   1   0  >528   1  RES    0   0   0   0   0   0   0   0   0  0   1  >12  0  >301   0  DSK  1      0      1
     **********************  >352   0  ADM    1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS    1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   1
     *  AFTER 30JUN77   0 *            OTH    1   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   0

DEC PDP1576   0   0   2   0  >528   1  RES    2   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  2      0      2
     **********************  >352   0  ADM    2   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS    2   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   1 *  >  0   0  H.ED   2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   2
     *  AFTER 30JUN77   1 *            OTH    2   0   0   0   0   0   0   0   0  0   0  > 0  2  >  0   0

DEC PDP20     0   1   0   0  >528   1  RES    0   1   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  1      1      1
     **********************  >352   0  ADM    0   0   0   0   0   0   0   0   0  0   1  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS    1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   1
     *  AFTER 30JUN77   0 *            OTH    1   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   0

DEC PDP2040   1   0   9   1  >528   7  RES    6   1   0   1   0   0   0   0   0  1   1  >12  0  >301   9  DSK  9      4     10
     **********************  >352   1  ADM    4   2   0   2   0   0   1   1   0  0   0  > 9  0  >251   1  OTH  0
     * INSTALLED:         *  >176   0  INS    3   1   0   1   1   1   0   1   0  1   1  > 6  0  >151   0
     *  PRIOR 30JUN77   7 *  >  0   0  H.ED  10   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   3 *            OTH    9   1   0   0   0   0   0   0   0  0   0  > 0 10  >  0   0

DEC PDP2050   1   0   2   0  >528   2  RES    0   0   1   1   1   0   0   0   0  0   0  >12  0  >301   2  DSK  2      1      3
     **********************  >352   0  ADM    2   0   0   1   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS    0   0   0   0   1   0   0   1   0  1   0  > 6  0  >151   0
     *  PRIOR 30JUN77   2 *  >  0   0  H.ED   3   0   0   0   0   0   0   0   0  0   0  > 3  1  > 51   0
     *  AFTER 30JUN77   1 *            OTH    3   0   0   0   0   0   0   0   0  0   0  > 0  2  >  0   0

DEC PDP5      0   0   0   1  >528   0  RES    0   0   0   0   0   1   0   0   0  0   0  >12  0  >301   0  DSK  0      0      0
     **********************  >352   0  ADM    1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS    0   0   0   0   0   1   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   1 *  >  0   1  H.ED   1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   0 *            OTH    1   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   1

DEC PDP6      0   0   1   0  >528   1  RES    0   0   0   0   0   0   0   0   0  0   1  >12  0  >301   1  DSK  1      0      1
     **********************  >352   0  ADM    1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS    1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   0 *            OTH    1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

DEC PDP7      0   0   4   0  >528   1  RES    2   0   1   0   0   0   0   0   1  1   0  >12  0  >301   0  DSK  0      0      0
     **********************  >352   1  ADM    5   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  2
     * INSTALLED:         *  >176   0  INS    2   1   0   1   0   0   0   0   1  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   5 *  >  0   1  H.ED   5   0   0   0   0   0   0   0   0  0   0  > 3  1  > 51   0
     *  AFTER 30JUN77   0 *            OTH    5   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   2

DEC PDP8      0   0  74  10  >528  23  RES  114   8   1   3   2   3   1   0   0  3  54  >12  0  >301   0  DSK 17      4     32
     **********************  >352   0  ADM  189   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176  11  INS  128  27   0   0   1   3   2   0   4  5  19  > 6  1  >151   0
     *  PRIOR 30JUN77 186 *  >  0  10  H.ED184   5   0   0   0   0   0   0   0  0   0  > 3  2  > 51   2
     *  AFTER 30JUN77   3 *            OTH  184   5   0   0   0   0   0   0   0  0   0  > 0 12  >  0  60
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                                                  SUMMARY OF COMPUTERS
     GROUP I
     MODEL    NUMBER   NUMBER    AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER   CORE CAP   ADDL     COMM PORTS
MFG  NO.      LEASED   PURCHASEC   AVG    ****                   PERCENT                *  TAPE     THOUSAND   STORAGE  ***********
              MFG H-CO MFG OTHR  HRS   MO TYPE N/O 10 20 30 40 50 60 70 80 90 100  DRIVES   OF CHARS   TYPE NO  BTCH INTRACT

DEC PDP8A      0    0   4    1  >528   0  RES   5  0  0  0  0  0  0  0  0  0   1  >12  0  >301   0   DSK  2     1      1
    ***********************     >352   0  ADM   6  0  0  0  0  0  0  0  0  0   0  > 9  0  >251   0   OTH  3
    * INSTALLED:          *     >176   3  INS   2  0  0  0  0  0  0  0  0  0   4  > 6  0  >151   0
    *  PRIOR 30JUN77    6 *     >  0   1  H.ED  6  0  0  0  0  0  0  0  0  0   0  > 3  0  > 51   0
    *  AFTER 30JUN77    0 *               OTH   6  0  0  0  0  0  0  0  0  0   0  > 0  0  >  0   5

DEC PDP8E      0    3  49    8  >528  17  RES  22  5  1  1  2  5  0  1  5 10   9  >12  0  >301   0   DSK 21    10     32
    ***********************     >352   2  ADM  52  0  3  0  0  0  1  0  2  0   3  > 9  0  >251   0   OTH 18
    * INSTALLED:          *     >176  15  INS  17  0 15  2  2  5  1  1  2  2  14  > 6  0  >151   0
    *  PRIOR 30JUN77   61 *     >  0  11  H.ED 60  1  0  0  0  0  0  0  0  0   0  > 3 11  > 51   3
    *  AFTER 30JUN77    0 *               OTH  60  1  0  0  0  0  0  0  0  0   0  > 0 22  >  0  53

DEC PDP8F      1    0   3    0  >528   3  RES   2  1  1  0  0  0  0  0  0  0   0  >12  0  >301   0   DSK  2     0      3
    ***********************     >352   0  ADM   3  0  0  0  0  0  0  0  0  0   1  > 9  0  >251   0   OTH  0
    * INSTALLED:          *     >176   0  INS   1  0  0  0  0  0  0  0  1  0   2  > 6  0  >151   0
    *  PRIOR 30JUN77    4 *     >  0   0  H.ED  4  0  0  0  0  0  0  0  0  0   0  > 3  0  > 51   0
    *  AFTER 30JUN77    0 *               OTH   4  0  0  0  0  0  0  0  0  0   0  > 0  2  >  0   3

DEC PDP8I      0    0  13    2  >528   8  RES   8  1  4  0  0  1  1  1  0  0   2  >12  0  >301   0   DSK  5     3      9
    ***********************     >352   1  ADM  16  1  0  0  0  0  0  1  0  0   0  > 9  0  >251   0   OTH  0
    * INSTALLED:          *     >176   4  INS   6  0  1  1  1  1  0  0  3  1   4  > 6  0  >151   0
    *  PRIOR 30JUN77   18 *     >  0   1  H.ED 18  0  0  0  0  0  0  0  0  0   0  > 3  0  > 51   2
    *  AFTER 30JUN77    0 *               OTH  17  1  0  0  0  0  0  0  0  0   0  > 0  5  >  0  12

DEC PDP8L      0    1  10    1  >528   8  RES   6  0  5  0  0  1  0  0  0  2   2  >12  0  >301   0   DSK  2     4      9
    ***********************     >352   1  ADM  16  0  0  0  0  0  0  0  0  0   0  > 9  0  >251   0   OTH  1
    * INSTALLED:          *     >176   1  INS   6  2  0  0  0  2  0  0  5  0   1  > 6  0  >151   0
    *  PRIOR 30JUN77   16 *     >  0   1  H.ED 15  0  0  0  0  1  0  0  0  0   0  > 3  0  > 51   0
    *  AFTER 30JUN77    0 *               OTH  15  1  0  0  0  0  0  0  0  0   0  > 0  2  >  0  12

DEC PDP8M      0    0   2    1  >528   0  RES   2  0  0  1  0  0  0  0  0  0   0  >12  0  >301   0   DSK  1     0      2
    ***********************     >352   1  ADM   3  0  0  0  0  0  0  0  0  0   0  > 9  0  >251   0   OTH  0
    * INSTALLED:          *     >176   1  INS   1  0  0  0  0  0  0  1  0  0   1  > 6  0  >151   0
    *  PRIOR 30JUN77    3 *     >  0   1  H.ED  3  0  0  0  0  0  0  0  0  0   0  > 3  0  > 51   0
    *  AFTER 30JUN77    0 *               OTH   3  0  0  0  0  0  0  0  0  0   0  > 0  0  >  0   3

DEC PDP9       0    0   9    0  >528   6  RES   5  2  0  0  1  1  1  0  0  1   3  >12  0  >301   0   DSK  4     2      3
    ***********************     >352   0  ADM  13  1  0  0  0  0  0  0  0  0   0  > 9  0  >251   0   OTH  3
    * INSTALLED:          *     >176   2  INS   7  1  0  0  1  1  1  0  0  2   1  > 6  0  >151   0
    *  PRIOR 30JUN77   14 *     >  0   2  H.ED 14  0  0  0  0  0  0  0  0  0   0  > 3  1  > 51   4
    *  AFTER 30JUN77    0 *               OTH  14  0  0  0  0  0  0  0  0  0   0  > 0  3  >  0   6

DEC 10         1    4  16    2  >528  13  RES   6  2  4  2  1  0  1  0  1  0   2  >12  0  >301  10   DSK 15     9     14
    ***********************     >352   2  ADM   6  3  0  2  3  3  0  1  0  0   1  > 9  0  >251   1   OTH  3
    * INSTALLED:          *     >176   0  INS   6  1  2  1  2  3  1  2  1  0   0  > 6  0  >151   2
    *  PRIOR 30JUN77   18 *     >  0   1  H.ED 17  1  1  0  0  0  0  0  0  0   0  > 3  3  > 51   2
    *  AFTER 30JUN77    1 *               OTH  15  3  0  1  0  0  0  0  0  0   0  > 0 12  >  0   0

DEC 6801       0    0   1    0  >528   0  RES   1  0  0  0  0  0  0  0  0  0   0  >12  0  >301   0   DSK  0     0      1
    ***********************     >352   1  ADM   1  0  0  0  0  0  0  0  0  0   0  > 9  0  >251   0   OTH  0
    * INSTALLED:          *     >176   0  INS   0  0  0  0  0  0  0  0  0  0   1  > 6  0  >151   0
    *  PRIOR 30JUN77    1 *     >  0   0  H.ED  1  0  0  0  0  0  0  0  0  0   0  > 3  0  > 51   0
    *  AFTER 30JUN77    0 *               OTH   1  0  0  0  0  0  0  0  0  0   0  > 0  0  >  0   0

DGS 280        0    0   2    0  >528   0  RES   0  0  0  0  0  0  0  2  0  0   0  >12  0  >301   0   DSK  0     2      2
    ***********************     >352   0  ADM   2  0  0  0  0  0  0  0  0  0   0  > 9  0  >251   0   OTH  0
    * INSTALLED:          *     >176   2  INS   0  0  0  2  0  0  0  0  0  0   0  > 6  0  >151   0
    *  PRIOR 30JUN77    2 *     >  0   0  H.ED  2  0  0  0  0  0  0  0  0  0   0  > 3  0  > 51   0
    *  AFTER 30JUN77    0 *               OTH   2  0  0  0  0  0  0  0  0  0   0  > 0  0  >  0   2

DIG 280        0    0   1    0  >528   0  RES   0  0  1  0  0  0  0  0  0  0   0  >12  0  >301   0   DSK  0     0      0
    ***********************     >352   0  ADM   1  0  0  0  0  0  0  0  0  0   0  > 9  0  >251   0   OTH  1
    * INSTALLED:          *     >176   0  INS   0  0  0  0  0  0  0  0  1  0   0  > 6  0  >151   0
    *  PRIOR 30JUN77    1 *     >  0   0  H.ED  1  0  0  0  0  0  0  0  0  0   0  > 3  0  > 51   0
    *  AFTER 30JUN77    0 *               OTH   1  0  0  0  0  0  0  0  0  0   0  > 0  0  >  0   1

DON            1    0   2    0  >528   0  RES   3  1  0  0  0  0  0  0  0  0   0  >12  0  >301   0   DSK  1     0      0
    ***********************     >352   1  ADM   4  0  0  0  0  0  0  0  0  0   0  > 9  0  >251   0   OTH  0
    * INSTALLED:          *     >176   2  INS   3  0  0  0  0  0  0  0  0  0   1  > 6  0  >151   0
    *  PRIOR 30JUN77    4 *     >  0   0  H.ED  4  0  0  0  0  0  0  0  0  0   0  > 3  0  > 51   3
    *  AFTER 30JUN77    0 *               OTH   4  0  0  0  0  0  0  0  0  0   0  > 0  1  >  0   0

DON 74         5    0   1    0  >528   2  RES   3  1  1  0  0  0  0  0  0  0   0  >12  0  >301   0   DSK  1     1      1
    ***********************     >352   0  ADM   1  0  0  0  0  0  0  0  0  1   3  > 9  0  >251   0   OTH  0
    * INSTALLED:          *     >176   1  INS   3  1  0  0  0  0  0  0  1  0   0  > 6  0  >151   0
    *  PRIOR 30JUN77    5 *     >  0   2  H.ED  5  0  0  0  0  0  0  0  0  0   0  > 3  0  > 51   1
    *  AFTER 30JUN77    0 *               OTH   5  0  0  0  0  0  0  0  0  0   0  > 0  0  >  0   0

DON 78         3    0   2    0  >528   1  RES   1  2  0  0  0  0  0  0  0  1   0  >12  0  >301   0   DSK  1     1      0
    ***********************     >352   0  ADM   0  2  0  0  0  0  0  0  0  1   1  > 9  0  >251   0   OTH  0
    * INSTALLED:          *     >176   2  INS   1  2  0  0  0  0  0  0  1  0   0  > 6  0  >151   0
    *  PRIOR 30JUN77    4 *     >  0   1  H.ED  4  0  0  0  0  0  0  0  0  0   0  > 3  0  > 51   0
    *  AFTER 30JUN77    0 *               OTH   4  0  0  0  0  0  0  0  0  0   0  > 0  1  >  0   1
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                                                    SUMMARY OF COMPUTERS
     GROUP 1                                1

    MODEL     NUMBER    NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER   CORE CAP   ADDL      COMM PORTS
MFG  NO.      LEASED   PURCHASED   AVG    ****                PERCENT                   *  TAPE    THOUSAND   STORAGE   ***********
             MFG H-CO MFG OTHR  HRS   NO  TYPE N/O  10  20  30  40  50  60  70  80  90 100  DRIVES   OF CHARS   TYPE NO   BTCH INTRACT

DON 88        0    0    3    0  >528   0  RES   2   0   1   0   0   0   0   0   0   0   0  >12  0   >301  0   DSK  0     0      0
      ************************  >352   0  ADM   1   0   0   0   1   0   0   0   1   0   0  > 9  0   >251  0   OTH  0
      * INSTALLED:           *  >176   1  INS   1   0   1   0   0   1   0   0   0   0   0  > 6  0   >151  0
      *  PRIOR 30JUN77     3 *  >  0   2  H.ED  3   0   0   0   0   0   0   0   0   0   0  > 3  0   > 51  0
      *  AFTER 30JUN77     0 *             OTH   3   0   0   0   0   0   0   0   0   0   0  > 0  0   >  0  1

DPT 5500      1    0    1    1  >528   1  RES   2   0   0   0   0   0   0   0   0   0   0  >12  0   >301  0   DSK  2     0      1
      ************************  >352   0  ADM   0   0   0   0   0   1   0   0   0   0   1  > 9  0   >251  0   OTH  0
      * INSTALLED:           *  >176   0  INS   1   0   0   0   0   1   0   0   0   0   0  > 6  0   >151  0
      *  PRIOR 30JUN77     2 *  >  0   1  H.ED  2   0   0   0   0   0   0   0   0   0   0  > 3  0   > 51  1
      *  AFTER 30JUN77     0 *             OTH   2   0   0   0   0   0   0   0   0   0   0  > 0  1   >  0  1

DSC METAIV    1    2    1    1  >528   2  RES   4   0   0   0   0   0   0   0   0   0   1  >12  0   >301  0   DSK  4     3      2
      ************************  >352   1  ADM   2   1   0   0   0   0   0   1   1   0   0  > 9  0   >251  0   OTH  0
      * INSTALLED:           *  >176   0  INS   1   0   1   1   0   0   0   2   0   0   0  > 6  0   >151  0
      *  PRIOR 30JUN77     4 *  >  0   0  H.ED  3   0   1   1   0   0   0   0   0   0   0  > 3  0   > 51  2
      *  AFTER 30JUN77     1 *             OTH   5   0   0   0   0   0   0   0   0   0   0  > 0  3   >  0  2

EAI TR48      0    0    2    0  >528   2  RES   0   2   0   0   0   0   0   0   0   0   0  >12  0   >301  0   DSK  0     0      0
      ************************  >352   0  ADM   2   0   0   0   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  0
      * INSTALLED:           *  >176   0  INS   0   0   0   0   0   0   0   0   0   2   0  > 6  0   >151  0
      *  PRIOR 30JUN77     2 *  >  0   0  H.ED  2   0   0   0   0   0   0   0   0   0   0  > 3  0   > 51  0
      *  AFTER 30JUN77     0 *             OTH   2   0   0   0   0   0   0   0   0   0   0  > 0  0   >  0  0

EAI 218       0    0    1    0  >528   0  RES   0   1   0   0   0   0   0   0   0   0   0  >12  0   >301  0   DSK  0     0      0
      ************************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  0
      * INSTALLED:           *  >176   1  INS   0   0   0   0   0   0   0   0   0   1   0  > 6  0   >151  0
      *  PRIOR 30JUN77     1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0   > 51  0
      *  AFTER 30JUN77     0 *             OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0   >  0  0

EAI 640       0    0    1    0  >528   0  RES   0   0   0   0   0   1   0   0   0   0   0  >12  0   >301  0   DSK  1     0      1
      ************************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  0
      * INSTALLED:           *  >176   1  INS   0   0   0   0   0   1   0   0   0   0   0  > 6  0   >151  0
      *  PRIOR 30JUN77     1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0   > 51  0
      *  AFTER 30JUN77     0 *             OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  1   >  0  1

EAI 680       0    0    3    6  >528   6  RES   0   0   1   0   0   2   0   0   6   0   0  >12  0   >301  0   DSK  0     0      6
      ************************  >352   1  ADM   9   0   0   0   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  0
      * INSTALLED:           *  >176   1  INS   0   0   0   6   0   2   0   0   1   0   0  > 6  0   >151  0
      *  PRIOR 30JUN77     9 *  >  0   1  H.ED  9   0   0   0   0   0   0   0   0   0   0  > 3  0   > 51  0
      *  AFTER 30JUN77     0 *             OTH   9   0   0   0   0   0   0   0   0   0   0  > 0  6   >  0  0

EAI 693       0    0    1    0  >528   0  RES   0   0   0   0   0   1   0   0   0   0   0  >12  0   >301  0   DSK  0     0      0
      ************************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  0
      * INSTALLED:           *  >176   1  INS   0   0   0   0   0   1   0   0   0   0   0  > 6  0   >151  0
      *  PRIOR 30JUN77     1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0   > 51  0
      *  AFTER 30JUN77     0 *             OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0   >  0  0

GAM SPC16     1    0    4    3  >528   3  RES   2   0   0   1   0   0   1   0   1   1   2  >12  0   >301  0   DSK  4     4      3
      ************************  >352   3  ADM   5   0   0   1   1   0   0   0   0   1   0  > 9  0   >251  0   OTH  0
      * INSTALLED:           *  >176   0  INS   2   2   1   1   1   0   0   1   0   0   0  > 6  0   >151  0
      *  PRIOR 30JUN77     8 *  >  0   1  H.ED  8   0   0   0   0   0   0   0   0   0   0  > 3  0   > 51  4
      *  AFTER 30JUN77     0 *             OTH   7   1   0   0   0   0   0   0   0   0   0  > 0  4   >  0  3

GAM 16        0    0    1    0  >528   1  RES   1   0   0   0   0   0   0   0   0   0   0  >12  0   >301  0   DSK  1     0      1
      ************************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  0
      * INSTALLED:           *  >176   0  INS   0   0   0   0   0   0   0   0   0   0   1  > 6  0   >151  0
      *  PRIOR 30JUN77     1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0   > 51  0
      *  AFTER 30JUN77     0 *             OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0   >  0  1

GAM 16/40     0    0    1    0  >528   0  RES   0   0   0   0   0   1   0   0   0   0   0  >12  0   >301  0   DSK  1     0      0
      ************************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  0
      * INSTALLED:           *  >176   1  INS   0   0   0   0   0   1   0   0   0   0   0  > 6  0   >151  0
      *  PRIOR 30JUN77     1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0   > 51  0
      *  AFTER 30JUN77     0 *             OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0   >  0  1

GAM 16/440    0    0    0    4  >528   0  RES   3   1   0   0   0   0   0   0   0   0   0  >12  0   >301  0   DSK  4     2      4
      ************************  >352   1  ADM   2   0   0   0   0   0   0   0   0   0   2  > 9  0   >251  0   OTH  0
      * INSTALLED:           *  >176   3  INS   2   0   0   0   0   0   0   0   0   1   1  > 6  0   >151  0
      *  PRIOR 30JUN77     2 *  >  0   0  H.ED  4   0   0   0   0   0   0   0   0   0   0  > 3  0   > 51  4
      *  AFTER 30JUN77     2 *             OTH   4   0   0   0   0   0   0   0   0   0   0  > 0  0   >  0  0

GAM 18/04     0    0    1    0  >528   0  RES   1   0   0   0   0   0   0   0   0   0   0  >12  0   >301  0   DSK  1     0      0
      ************************  >352   0  ADM   0   1   0   0   0   0   0   0   0   0   0  > 9  0   >251  0   OTH  0
      * INSTALLED:           *  >176   1  INS   0   0   0   0   0   0   0   0   0   1   0  > 6  0   >151  0
      *  PRIOR 30JUN77     1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0   > 51  0
      *  AFTER 30JUN77     0 *             OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  1   >  0  1

GAM 18/30     3    2   14    1  >528   1  RES  12   5   0   0   0   0   0   0   0   0   0  >12  0   >301  0   DSK 16    11      5
      ************************  >352   1  ADM   1   0   1   1   2   3   1   2   0   3   3  > 9  0   >251  0   OTH  1
      * INSTALLED:           *  >176   9  INS   5   4   1   1   0   2   2   0   2   0   0  > 6  0   >151  0
      *  PRIOR 30JUN77    17 *  >  0   6  H.ED 16   0   0   1   0   0   0   0   0   0   0  > 3  0   > 51  4
      *  AFTER 30JUN77     0 *             OTH  14   2   0   0   1   0   0   0   0   0   0  > 0  6   >  0 11
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                                                  SUMMARY OF COMPUTERS

     GROUP (                                  )

      MODEL     NUMBER    NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER   CORE CAP   ADDL      COMM PORTS
MFG  NO.        LEASED  PURCHASED    AVG    ****                 PERCENT                  *  TAPE     THOUSAND   STORAGE   ***********
              MFG H-CO MFG OTHR HRS      NO TYPE N/O 10  20  30  40  50  60  70  80 90 100   DRIVES   OF CHARS   TYPE NO   BTCH INTRACT

GEC GE225     0    0    0    2  >528   0  RES   0   0   1   1   0   0   0   0   0  0   0   >12  0   >301   0   DSK  2     2      1
    **********************  >352   0  ADM   1   0   0   1   0   0   0   0   0  0   0   > 9  0   >251   0   OTH  0
    * INSTALLED:           *  >176   2  INS   0   0   0   0   0   1   0   0   1  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77    2  *  >  0   0  H.ED  2   0   0   0   0   0   0   0   0  0   0   > 3  1   > 51   1
    *  AFTER 30JUN77    0  *             OTH   1   1   0   0   0   0   0   0   0  0   0   > 0  1   >  0   1

GEC GE235     0    0    1    0  >528   1  RES   1   0   0   0   0   0   0   0   0  0   0   >12  0   >301   1   DSK  0     0      0
    **********************  >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH  0
    * INSTALLED:           *  >176   0  INS   0   0   0   0   0   0   0   0   0  0   1   > 6  0   >151   0
    *  PRIOR 30JUN77    1  *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  1   > 51   0
    *  AFTER 30JUN77    0  *             OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   0

GEC GE310     0    0    0    0  >528   0  RES   1   0   0   0   0   0   0   0   0  0   0   >12  0   >301   0   DSK  0     0      0
    **********************  >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH  0
    * INSTALLED:           *  >176   0  INS   1   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77    1  *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77    0  *             OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   0

GEC 772       5    0    0    0  >528   0  RES   0   0   0   0   0   0   5   0   0  0   0   >12  0   >301   0   DSK  0     0      0
    **********************  >352   0  ADM   0   0   0   0   5   0   0   0   0  0   0   > 9  0   >251   0   OTH  0
    * INSTALLED:           *  >176   5  INS   5   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77    5  *  >  0   0  H.ED  5   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77    0  *             OTH   5   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   0

HAR COPE      0    0    1    0  >528   0  RES   0   0   1   0   0   0   0   0   0  0   0   >12  0   >301   0   DSK  0     1      0
    **********************  >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH  0
    * INSTALLED:           *  >176   1  INS   0   0   0   0   0   0   0   0   1  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77    1  *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77    0  *             OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   1

HAR SLASH4    0    0    1    0  >528   1  RES   0   0   0   0   0   0   0   0   0  0   1   >12  0   >301   0   DSK  1     0      1
    **********************  >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH  0
    * INSTALLED:           *  >176   0  INS   1   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   1
    *  PRIOR 30JUN77    1  *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77    0  *             OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  1   >  0   0

HAR SLASH7    0    0    1    0  >528   0  RES   0   0   0   0   0   0   0   0   0  0   1   >12  0   >301   0   DSK  1     1      1
    **********************  >352   1  ADM   0   1   0   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH  0
    * INSTALLED:           *  >176   0  INS   1   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77    1  *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   1
    *  AFTER 30JUN77    0  *             OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  1   >  0   0

HAR 110       0    0    2    0  >528   2  RES   0   0   0   0   0   0   0   0   0  0   2   >12  0   >301   0   DSK  2     1      2
    **********************  >352   0  ADM   2   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH  0
    * INSTALLED:           *  >176   0  INS   2   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   2
    *  PRIOR 30JUN77    0  *  >  0   0  H.ED  2   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77    2  *             OTH   2   0   0   0   0   0   0   0   0  0   0   > 0  2   >  0   0

HAR 120       0    0    1    0  >528   0  RES   0   1   0   0   0   0   0   0   0  0   0   >12  0   >301   0   DSK  1     1      1
    **********************  >352   1  ADM   0   0   0   0   0   0   0   0   0  1   0   > 9  0   >251   0   OTH  0
    * INSTALLED:           *  >176   0  INS   0   1   0   0   0   0   0   0   0  0   0   > 6  0   >151   1
    *  PRIOR 30JUN77    1  *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77    0  *             OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  1   >  0   0

HAR 1200      1    1    6    0  >528   0  RES   2   4   0   0   1   0   1   0   0  0   0   >12  0   >301   0   DSK  0     4      0
    **********************  >352   0  ADM   2   0   1   0   1   0   2   0   1  1   0   > 9  0   >251   0   CTH  0
    * INSTALLED:           *  >176   8  INS   0   1   1   2   1   1   1   0   1  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77    8  *  >  0   0  H.ED  8   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77    0  *             OTH   8   0   0   0   0   0   0   0   0  0   0   > 0  1   >  0   7

HAR 125       0    0    1    0  >528   0  RES   1   0   0   0   0   0   0   0   0  0   0   >12  0   >301   1   DSK  1     1      1
    **********************  >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0   CTH  0
    * INSTALLED:           *  >176   0  INS   1   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77    0  *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77    1  *             OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  1   >  0   0

HAR 1600      2    0    0    0  >528   0  RES   1   0   1   0   0   0   0   0   0  0   0   >12  0   >301   1   DSK  1     2      1
    **********************  >352   0  ADM   1   0   1   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH  0
    * INSTALLED:           *  >176   2  INS   1   0   0   0   0   0   0   1   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77    2  *  >  0   0  H.ED  2   0   0   0   0   0   0   0   0  0   0   > 3  1   > 51   0
    *  AFTER 30JUN77    0  *             OTH   2   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   1

HAR 1620      1    0    0    0  >528   0  RES   1   0   0   0   0   0   0   0   0  0   0   >12  0   >301   0   DSK  1     0      0
    **********************  >352   0  ADM   0   0   0   0   0   0   0   0   0  0   1   > 9  0   >251   0   OTH  0
    * INSTALLED:           *  >176   1  INS   1   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77    1  *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77    0  *             OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  1   >  0   1

HAR 2000      1    0    0    0  >528   0  RES   1   0   0   0   0   0   0   0   0  0   0   >12  0   >301   0   DSK  0     0      0
    **********************  >352   0  ADM   0   0   0   0   0   0   0   0   0  0   1   > 9  0   >251   0   CTH  1
    * INSTALLED:           *  >176   0  INS   1   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77    1  *  >  0   1  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77    0  *             OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  1   >  0   1
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                                                            SUMMARY OF COMPUTERS
    GROUP (                                         )

      MODEL     NUMBER     NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER   CORE CAP   ADDL       COMM PORTS
MFG   NO.       LEASED   PURCHASED    AVG    ****                PERCENT                   *  TAPE     THOUSAND   STORAGE    ***********
              MFG H-CC MFG OTHR   HRS   NO  TYPE N/O  10  20  30  40  50  60  70  80  90 100 DRIVES   OF CHARS   TYPE NO    BTCH INTRACT

MAR 210         0    0    0    1  >528   0  RES    0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     1        1
      **************************  >352   1  ADM    0   0   1   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:             *  >176   0  INS    0   0   0   0   0   0   0   0   1   0   0  > 6  0  >151   1
      *  PRIOR 30JUN77       1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77       0 *          OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

MAR 220         0    1    1    0  >528   0  RES    1   1   0   0   0   0   0   0   0   0   0  >12  0  >301   1  DSK   2     1        2
      **************************  >352   0  ADM    1   0   0   0   1   0   0   0   0   0   0  > 9  0  >251   1  OTH   0
      * INSTALLED:             *  >176   2  INS    1   0   0   0   0   1   0   0   0   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77       2 *  >  0   0  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77       0 *          OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  2  >  0   0

MAR 6024        0    1    1    0  >528   0  RES    0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     1        1
      **************************  >352   1  ADM    0   0   0   0   1   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:             *  >176   0  INS    0   0   0   0   0   1   0   0   0   0   0  > 6  0  >151   1
      *  PRIOR 30JUN77       1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77       0 *          OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

MAR 6024/3      0    0    3    1  >528   2  RES    0   1   0   1   0   0   0   0   0   1   0  >12  0  >301   0  DSK   3     3        3
      **************************  >352   0  ADM    2   1   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:             *  >176   1  INS    0   1   0   0   0   0   1   0   0   1   0  > 6  0  >151   0
      *  PRIOR 30JUN77       3 *  >  0   0  H.ED   3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   3
      *  AFTER 30JUN77       0 *          OTH    3   0   0   0   0   0   0   0   0   0   0  > 0  3  >  0   0

MAR 6024/5      0    0    6    2  >528   4  RES    0   0   0   0   0   0   0   1   2   0   3  >12  0  >301   0  DSK   6     2        6
      **************************  >352   1  ADM    4   1   1   0   0   0   0   0   0   0   0  > 9  0  >251   1  OTH   1
      * INSTALLED:             *  >176   1  INS    4   1   1   0   0   0   0   0   0   0   0  > 6  0  >151   4
      *  PRIOR 30JUN77       6 *  >  0   0  H.ED   6   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77       0 *          OTH    5   1   0   0   0   0   0   0   0   0   0  > 0  5  >  0   1

MAR 6024/6      0    0    1    0  >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0        0
      **************************  >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   1  OTH   0
      * INSTALLED:             *  >176   0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77       0 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77       1 *          OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HEP             0    0    1    0  >528   0  RES    5   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0        0
      **************************  >352   0  ADM    5   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:             *  >176   0  INS    4   0   0   0   0   0   0   0   0   0   1  > 6  0  >151   0
      *  PRIOR 30JUN77       5 *  >  0   1  H.ED   5   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77       0 *          OTH    5   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

HEP GC-MS       0    0    0    1  >528   1  RES    0   0   0   0   0   0   0   0   0   0   1  >12  0  >301   0  DSK   1     0        1
      **************************  >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:             *  >176   0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77       1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
      *  AFTER 30JUN77       0 *          OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HEP 2000        0    1   24    1  >528  21  RES   14  12   1   2   0   0   0   0   0   0   3  >12  0  >301   0  DSK  25     4       23
      **************************  >352   2  ADM   23   3   0   0   0   2   2   0   2   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:             *  >176   3  INS    6   1   0   2   1   4   3   3   2   3   7  > 6  0  >151   1
      *  PRIOR 30JUN77      32 *  >  0   0  H.ED  29   1   1   0   1   0   0   0   0   0   0  > 3  0  > 51  17
      *  AFTER 30JUN77       0 *          OTH   27   0   2   1   1   1   0   0   0   0   0  > 0 26  >  0   7

HEP 2000A       0    0    2    0  >528   0  RES    2   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   2     0        2
      **************************  >352   1  ADM    0   0   1   0   0   0   0   0   0   1   0  > 9  0  >251   0  OTH   0
      * INSTALLED:             *  >176   1  INS    0   0   1   0   0   0   0   0   1   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77       2 *  >  0   0  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   0
      *  AFTER 30JUN77       0 *          OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   2

HEP 2000AC      0    1    1    0  >528   2  RES    1   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   2     1        2
      **************************  >352   0  ADM    1   1   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:             *  >176   0  INS    0   0   0   0   0   1   0   0   0   1   0  > 6  0  >151   0
      *  PRIOR 30JUN77       2 *  >  0   0  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
      *  AFTER 30JUN77       0 *          OTH    1   0   0   0   1   0   0   0   0   0   0  > 0  2  >  0   1

HEP 2000C       0    0    1    0  >528   1  RES    0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     0        1
      **************************  >352   0  ADM    0   1   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:             *  >176   0  INS    0   0   0   0   0   0   0   0   1   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77       1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
      *  AFTER 30JUN77       0 *          OTH    0   1   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

HEP 2000E       0    0    5    1  >528   2  RES    5   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   6     2        6
      **************************  >352   0  ADM    4   1   1   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:             *  >176   4  INS    0   0   0   0   0   0   0   0   1   1   4  > 6  0  >151   0
      *  PRIOR 30JUN77       6 *  >  0   0  H.ED   6   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
      *  AFTER 30JUN77       0 *          OTH    6   0   0   0   0   0   0   0   0   0   0  > 0  2  >  0   5

HEP 2000F       0    0    7    0  >528   4  RES    5   1   0   1   0   0   0   0   0   0   0  >12  0  >301   0  DSK   7     2        5
      **************************  >352   1  ADM    6   0   0   0   0   1   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:             *  >176   2  INS    0   0   0   0   0   3   0   0   1   0   3  > 6  0  >151   0
      *  PRIOR 30JUN77       7 *  >  0   0  H.ED   5   0   0   0   0   2   0   0   0   0   0  > 3  0  > 51   5
      *  AFTER 30JUN77       0 *          OTH    5   2   0   0   0   0   0   0   0   0   0  > 0  6  >  0   2
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                                         SUMMARY OF COMPUTERS

      GROUP I

     MODEL    NUMBER   NUMBER    AVBLE/MO ************ PERCENT USAGE BY TYPE ************   NUMBER  CORE CAP   ADDL      COMM PORTS
MFG  NO.      LEASED  PURCHASED    AVG    ****                  PERCENT                 *  TAPE    THOUSAND   STORAGE   ***********
            MFG H-CO MFG CTHR  HRS    NO  TYPE N/0  10  20  30  40  50  60  70  80  90 100  DRIVES  OF CHARS   TYPE NO   BTCH INTRACT

HEP 20006     0   0   1   0  >528   0  RES    2   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  1    0      1
    **********************   >352   0  ADM    2   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:         *   >176   1  INS    0   0   0   0   0   0   0   0   0   1   1  > 6  0  >151   0
    *  PRIOR 30JUN77   1 *   >  0   0  H.ED   1   1   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77   1 *             OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   1

HEP 2000II    0   1   0   0  >528   0  RES    0   0   1   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  1    0      1
    **********************   >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:         *   >176   1  INS    0   0   0   0   0   0   0   0   0   1   0  > 6  0  >151   0
    *  PRIOR 30JUN77   1 *   >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
    *  AFTER 30JUN77   0 *             OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

HEP 2001      0   0   0   0  >528   0  RES    0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0    0      0
    **********************   >352 [illegible] ADM 1 0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:         *   >176 [illegible] INS 0 0   0   0   0   0   0   0   0   0   1  > 6  0  >151   0
    *  PRIOR 30JUN77   1 *   >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77   0 *             OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HEP 21-MX     1   0   7   1  >528   3  RES    2   3   0   1   1   0   0   0   1   0   3  >12  0  >301   0  DSK  5    4      4
    **********************   >352   0  ADM    8   1   1   1   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  1
    * INSTALLED:         *   >176   3  INS    5   0   1   0   0   1   1   2   0   1   0  > 6  0  >151   0
    *  PRIOR 30JUN77  11 *   >  0   0  H.ED  11   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   4
    *  AFTER 30JUN77   0 *             OTH   11   0   0   0   0   0   0   0   0   0   0  > 0  4  >  0   2

HEP 21-MY     0   0   1   0  >528   1  RES    0   0   0   0   0   0   0   0   0   0   1  >12  0  >301   0  DSK  1    0      0
    **********************   >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  CTH  0
    * INSTALLED:         *   >176   0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77   1 *   >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
    *  AFTER 30JUN77   0 *             OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HEP 2100      0   0   6   1  >528   5  RES   15   2   0   1   0   0   0   0   0   0   1  >12  0  >301   1  DSK  5    2      4
    **********************   >352   0  ADM   15   2   0   0   0   0   0   0   0   1   1  > 9  0  >251   0  OTH  0
    * INSTALLED:         *   >176   0  INS   14   2   0   0   0   0   0   1   2   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77  19 *   >  0   1  H.ED  19   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   2
    *  AFTER 30JUN77   0 *             OTH   19   0   0   0   0   0   0   0   0   0   0  > 0  5  >  0   3

HEP 2100A     0   0   6   0  >528   5  RES    0   0   0   1   0   0   0   0   0   2   3  >12  0  >301   0  DSK  3    2      3
    **********************   >352   0  ADM    6   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:         *   >176   0  INS    3   2   0   0   0   0   0   0   1   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77   6 *   >  0   1  H.EC   6   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   2
    *  AFTER 30JUN77   0 *             OTH    6   0   0   0   0   0   0   0   0   0   0  > 0  4  >  0   3

HEP 2100E     0   0   0   1  >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0    0      1
    **********************   >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:         *   >176   1  INS    0   0   0   0   0   0   0   0   0   0   1  > 6  0  >151   0
    *  PRIOR 30JUN77   1 *   >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   0
    *  AFTER 30JUN77   0 *             OTH    0   1   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

HEP 2108      0   0   2   0  >528   0  RES    7   0   0   0   0   0   0   0   0   0   2  >12  0  >301   0  DSK  0    0      0
    **********************   >352   0  ADM    9   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:         *   >176   0  INS    9   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77   9 *   >  0   2  H.ED   9   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77   0 *             OTH    9   0   0   0   0   0   0   0   0   0   0  > 0  2  >  0   2

HEP 2109      0   0   0   0  >528   0  RES    3   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0    0      0
    **********************   >352   0  ADM    3   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:         *   >176   0  INS    3   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77   3 *   >  0   0  H.ED   3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77   0 *             OTH    3   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HEP 2112      0   0   0   0  >528   0  RES    3   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0    0      0
    **********************   >352   0  ADM    3   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:         *   >176   0  INS    3   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77   3 *   >  0   0  H.ED   3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77   0 *             OTH    3   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HEP 2113      0   0   0   0  >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0    0      0
    **********************   >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:         *   >176   0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77   1 *   >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77   0 *             OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HEP 2114      0   0   0   0  >528   0  RES    5   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0    0      0
    **********************   >352   0  ADM    5   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:         *   >176   0  INS    5   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77   5 *   >  0   0  H.ED   5   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77   0 *             OTH    5   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HEP 2114A     0   0   1   0  >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0    0      0
    **********************   >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  CTH  0
    * INSTALLED:         *   >176   0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77   1 *   >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77   0 *             OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0
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                                                      SUMMARY OF COMPUTERS
    GROUP I                                        I

    MODEL    NUMBER  NUMBER    AVBLE/MO ************ PERCENT USAGE BY TYPE ************   NUMBER   CORE CAP   ADDL      COMM PORTS
MFG NO.      LEASED  PURCHASED   AVG    ****                  PERCENT                 *   TAPE     THOUSAND   STORAGE   ***********
            MFG H-CO MFG OTHR HRS    NO  TYPE N/0  10  20  30  40  50  60  70  80  90 100  DRIVES   OF CHARS   TYPE NO   BTCH INTRACT

HEP 2114B     0   0   2   1 >528   0  RES    0   2   1   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  1     2      2
    ************************ >352   0  ADM    3   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:           * >176   1  INS    0   0   0   0   0   0   0   0   0   2   1  > 6  0  >151   0
    *  PRIOR 30JUN77     3 * >  0   1  H.ED   3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *          OTH    2   1   0   0   0   0   0   0   0   0   0  > 0  1  >  0   3

HEP 2115      0   0   1   1 >528   1  RES    3   1   0   0   0   0   0   0   0   0   1  >12  0  >301   0  DSK  0     1      2
    ************************ >352   0  ADM    5   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:           * >176   1  INS    4   0   0   0   0   0   0   0   0   1   0  > 6  0  >151   0
    *  PRIOR 30JUN77     5 * >  0   0  H.ED   5   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *          OTH    5   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   2

HEP 2115A     0   0   2   0 >528   0  RES    0   0   0   0   0   0   0   0   0   1   1  >12  0  >301   0  DSK  0     0      1
    ************************ >352   0  ADM    2   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:           * >176   0  INS    1   1   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77     2 * >  0   1  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *          OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   2

HEP 2115B     0   0   0   1 >528   0  RES    0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0     1      1
    ************************ >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:           * >176   0  INS    0   0   0   0   0   0   0   0   0   1   0  > 6  0  >151   0
    *  PRIOR 30JUN77     1 * >  0   1  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *          OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

HEP 2116      0   0   0   0 >528   0  RES   13   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0     0      0
    ************************ >352   0  ADM   13   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:           * >176   0  INS   13   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77    13 * >  0   0  H.ED  13   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *          OTH   13   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HEP 2116A     0   0   1   0 >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0     0      0
    ************************ >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:           * >176   0  INS    0   0   0   0   0   0   0   0   0   0   1  > 6  0  >151   0
    *  PRIOR 30JUN77     1 * >  0   1  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *          OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

HEP 2116B     0   0   2   0 >528   1  RES    0   0   0   0   0   1   0   0   0   0   1  >12  0  >301   0  DSK  2     1      0
    ************************ >352   0  ADM    1   0   1   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  1
    * INSTALLED:           * >176   0  INS    1   0   1   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77     2 * >  0   1  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *          OTH    1   1   0   0   0   0   0   0   0   0   0  > 0  1  >  0   2

HEP 2116C     0   0   0   0 >528   0  RES    0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  1     1      0
    ************************ >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:           * >176   1  INS    0   0   0   0   0   0   0   0   0   1   0  > 6  0  >151   0
    *  PRIOR 30JUN77     1 * >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
    *  AFTER 30JUN77     0 *          OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

HEP 2124      0   0   0   0 >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0     0      0
    ************************ >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:           * >176   0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77     1 * >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *          OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HEP 224       0   0   0   0 >528   0  RES    2   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0     0      0
    ************************ >352   0  ADM    2   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:           * >176   0  INS    2   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77     2 * >  0   0  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *          OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HEP 24        0   0   0   0 >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0     0      0
    ************************ >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:           * >176   0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77     1 * >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *          OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HEP 3000      4   1  18   1 >528  11  RES    9   9   2   1   0   3   0   0   0   0   1  >12  0  >301   5  DSK 24    16     23
    ************************ >352   1  ADM    7   1   0   0   2   4   0   3   2   4   2  > 9  0  >251   7  OTH  0
    * INSTALLED:           * >176   8  INS    4   6   2   2   2   6   0   1   1   1   0  > 6  0  >151   5
    *  PRIOR 30JUN77    20 * >  0   1  H.ED  24   0   0   0   0   1   0   0   0   0   0  > 3  0  > 51   6
    *  AFTER 30JUN77     5 *          OTH   23   1   1   0   0   0   0   0   0   0   0  > 0 24  >  0   1

HEP 3000 II   1   0   0   0 >528   0  RES    0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  1     1      1
    ************************ >352   1  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   1  OTH  0
    * INSTALLED:           * >176   0  INS    0   0   0   0   0   0   0   0   0   0   1  > 6  0  >151   0
    *  PRIOR 30JUN77     1 * >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77     0 *          OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

HEP 3000CX    1   1   0   0 >528   2  RES    0   2   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  2     2      2
    ************************ >352   0  ADM    0   0   0   0   0   0   1   0   1   0   0  > 9  0  >251   0  OTH  0
    * INSTALLED:           * >176   0  INS    0   0   1   1   0   0   0   0   0   0   0  > 6  0  >151   1
    *  PRIOR 30JUN77     2 * >  0   0  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
    *  AFTER 30JUN77     0 *          OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  2  >  0   0
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                                                 SUMMARY OF COMPUTERS

      GROUP (                                  )

      MODEL    NUMBER    NUMBER    AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER   CORE CAP  ADDL      COMM PORTS
  MFG  NO.     LEASED  PURCHASED    AVG     ****               PERCENT                   *  TAPE    THOUSAND  STORAGE   ***********
              MFG H-CO MFG OTHR   HRS   NO  TYPE N/O 10 20 30 40 50 60 70 80 90 100        DRIVES   OF CHARS  TYPE NO   BTCH INTRACT

  HEP 3000II    1   1   4    0   >528   3   RES   4   2  0  0  0  0  0  0  0  0   0     >12  0   >301  1   DSK  6     3      6
       ************************  >352   1   ADM   1   1  0  0  1  1  1  0  1  0   0     > 9  0   >251  4   OTH  1
       * INSTALLED:            * >176   2   INS   0   0  2  0  0  2  0  0  0  1   1     > 6  0   >151  1
       *  PRIOR 30JUN77     4  * >  0   0   H.ED  5   1  0  0  0  0  0  0  0  0   0     > 3  0   > 51  0
       *  AFTER 30JUN77     2  *            OTH   6   0  0  0  0  0  0  0  0  0   0     > 0  6   >  0  0

  HEP 5451      0   0   0    0   >528   0   RES   0   0  0  0  0  0  0  0  0  0   1     >12  0   >301  0   DSK  0     0      0
       ************************  >352   0   ADM   1   0  0  0  0  0  0  0  0  0   0     > 9  0   >251  0   OTH  0
       * INSTALLED:            * >176   0   INS   1   0  0  0  0  0  0  0  0  0   0     > 6  0   >151  0
       *  PRIOR 30JUN77     1  * >  0   0   H.ED  1   0  0  0  0  0  0  0  0  0   0     > 3  0   > 51  0
       *  AFTER 30JUN77     0  *            OTH   1   0  0  0  0  0  0  0  0  0   0     > 0  0   >  0  0

  HEP 9100      0   0   1    0   >528   0   RES   1   0  0  0  0  0  0  0  0  0   0     >12  0   >301  0   DSK  0     0      0
       ************************  >352   0   ADM   1   0  0  0  0  0  0  0  0  0   0     > 9  0   >251  0   OTH  0
       * INSTALLED:            * >176   1   INS   0   0  0  0  0  0  0  0  0  0   1     > 6  0   >151  0
       *  PRIOR 30JUN77     1  * >  0   0   H.ED  1   0  0  0  0  0  0  0  0  0   0     > 3  0   > 51  0
       *  AFTER 30JUN77     0  *            OTH   1   0  0  0  0  0  0  0  0  0   0     > 0  0   >  0  1

  HEP 9603A     0   0   1    0   >528   0   RES   0   0  0  0  0  0  0  0  0  0   1     >12  0   >301  0   DSK  1     0      1
       ************************  >352   0   ADM   1   0  0  0  0  0  0  0  0  0   0     > 9  0   >251  0   OTH  0
       * INSTALLED:            * >176   1   INS   1   0  0  0  0  0  0  0  0  0   0     > 6  0   >151  0
       *  PRIOR 30JUN77     1  * >  0   0   H.ED  1   0  0  0  0  0  0  0  0  0   0     > 3  0   > 51  0
       *  AFTER 30JUN77     0  *            OTH   1   0  0  0  0  0  0  0  0  0   0     > 0  0   >  0  1

  HEP 9810      0   0   0    0   >528   0   RES   1   0  0  0  0  0  0  0  0  0   0     >12  0   >301  0   DSK  0     0      0
       ************************  >352   0   ADM   1   0  0  0  0  0  0  0  0  0   0     > 9  0   >251  0   OTH  0
       * INSTALLED:            * >176   0   INS   1   0  0  0  0  0  0  0  0  0   0     > 6  0   >151  0
       *  PRIOR 30JUN77     1  * >  0   0   H.ED  1   0  0  0  0  0  0  0  0  0   0     > 3  0   > 51  0
       *  AFTER 30JUN77     0  *            OTH   1   0  0  0  0  0  0  0  0  0   0     > 0  0   >  0  0

  HEP 9820      0   0   1    0   >528   0   RES   0   0  0  1  0  0  0  0  0  0   0     >12  0   >301  0   DSK  0     0      0
       ************************  >352   0   ADM   0   1  0  0  0  0  0  0  0  0   0     > 9  0   >251  0   OTH  0
       * INSTALLED:            * >176   0   INS   0   0  0  0  0  0  0  1  0  0   0     > 6  0   >151  0
       *  PRIOR 30JUN77     1  * >  0   1   H.ED  1   0  0  0  0  0  0  0  0  0   0     > 3  0   > 51  0
       *  AFTER 30JUN77     0  *            OTH   1   0  0  0  0  0  0  0  0  0   0     > 0  0   >  0  0

  HEP 9830      0   0   1    0   >528   1   RES   0   0  0  0  0  0  0  0  1  0   0     >12  0   >301  0   DSK  0     0      0
       ************************  >352   0   ADM   1   0  0  0  0  0  0  0  0  0   0     > 9  0   >251  0   OTH  0
       * INSTALLED:            * >176   0   INS   0   0  0  1  0  0  0  0  0  0   0     > 6  0   >151  0
       *  PRIOR 30JUN77     1  * >  0   0   H.ED  1   0  0  0  0  0  0  0  0  0   0     > 3  0   > 51  0
       *  AFTER 30JUN77     0  *            OTH   1   0  0  0  0  0  0  0  0  0   0     > 0  0   >  0  1

  HEP 9830A     0   0   2    0   >528   0   RES   3   0  0  0  0  1  0  0  0  0   0     >12  0   >301  0   DSK  0     0      0
       ************************  >352   0   ADM   4   0  0  0  0  0  0  0  0  0   0     > 9  0   >251  0   OTH  0
       * INSTALLED:            * >176   1   INS   3   0  0  0  0  1  0  0  0  0   0     > 6  0   >151  0
       *  PRIOR 30JUN77     4  * >  0   0   H.ED  4   0  0  0  0  0  0  0  0  0   0     > 3  0   > 51  0
       *  AFTER 30JUN77     0  *            OTH   4   0  0  0  0  0  0  0  0  0   0     > 0  0   >  0  0

  HIS 105       0   0   1    0   >528   0   RES   1   0  0  0  0  0  0  0  0  0   0     >12  0   >301  0   DSK  1     0      0
       ************************  >352   0   ADM   0   0  0  0  0  0  0  0  0  0   1     > 9  0   >251  0   OTH  0
       * INSTALLED:            * >176   0   INS   1   0  0  0  0  0  0  0  0  0   0     > 6  0   >151  0
       *  PRIOR 30JUN77     1  * >  0   0   H.ED  1   0  0  0  0  0  0  0  0  0   0     > 3  0   > 51  0
       *  AFTER 30JUN77     0  *            OTH   1   0  0  0  0  0  0  0  0  0   0     > 0  1   >  0  1

  HCN IMPS      0   0   2    0   >528   2   RES   0   0  0  0  0  0  0  0  0  2   0     >12  0   >301  0   DSK  0     0      2
       ************************  >352   0   ADM   2   0  0  0  0  0  0  0  0  0   0     > 9  0   >251  0   OTH  0
       * INSTALLED:            * >176   0   INS   2   0  0  0  0  0  0  0  0  0   0     > 6  0   >151  0
       *  PRIOR 30JUN77     2  * >  0   0   H.ED  0   2  0  0  0  0  0  0  0  0   0     > 3  0   > 51  2
       *  AFTER 30JUN77     0  *            OTH   0   2  0  0  0  0  0  0  0  0   0     > 0  0   >  0  0

  HON 115       0   1   1    0   >528   0   RES   2   0  0  0  0  0  0  0  0  0   0     >12  0   >301  0   DSK  2     1      0
       ************************  >352   0   ADM   0   0  0  0  1  0  0  0  0  1   0     > 9  0   >251  0   OTH  0
       * INSTALLED:            * >176   2   INS   0   0  1  0  0  0  0  1  0  0   0     > 6  0   >151  1
       *  PRIOR 30JUN77     2  * >  0   0   H.ED  2   0  0  0  0  0  0  0  0  0   0     > 3  1   > 51  0
       *  AFTER 30JUN77     0  *            OTH   2   0  0  0  0  0  0  0  0  0   0     > 0  1   >  0  1

  HON 120       0   0   1    0   >528   0   RES   1   0  0  0  0  0  0  0  0  0   0     >12  0   >301  0   DSK  1     0      0
       ************************  >352   0   ADM   0   0  1  0  0  0  0  0  0  0   0     > 9  0   >251  0   OTH  0
       * INSTALLED:            * >176   1   INS   0   0  0  0  0  0  0  0  1  0   0     > 6  0   >151  0
       *  PRIOR 30JUN77     1  * >  0   0   H.ED  1   0  0  0  0  0  0  0  0  0   0     > 3  1   > 51  0
       *  AFTER 30JUN77     0  *            OTH   1   0  0  0  0  0  0  0  0  0   0     > 0  0   >  0  1

  HON 1200      0   0   1    0   >528   1   RES   1   0  0  0  0  0  0  0  0  0   0     >12  0   >301  0   DSK  1     1      0
       *****-******************  >352   0   ADM   0   0  0  1  0  0  0  0  0  0   0     > 9  0   >251  0   OTH  0
       * INSTALLED:            * >176   0   INS   0   0  0  0  0  0  0  1  0  0   0     > 6  0   >151  0
       *  PRIOR 30JUN77     1  * >  0   0   H.ED  1   0  0  0  0  0  0  0  0  0   0     > 3  0   > 51  0
       *  AFTER 30JUN77     0  *            OTH   1   0  0  0  0  0  0  0  0  0   0     > 0  1   >  0  1

  HON 124       0   0   1    0   >528   1   RES   0   0  0  0  0  0  0  0  0  0   1     >12  0   >301  0   DSK  1     1      1
       ************************  >352   0   ADM   1   0  0  0  0  0  0  0  0  0   0     > 9  0   >251  0   OTH  0
       * INSTALLED:            * >176   0   INS   1   0  0  0  0  0  0  0  0  0   0     > 6  0   >151  1
       *  PRIOR 30JUN77     1  * >  0   0   H.ED  1   0  0  0  0  0  0  0  0  0   0     > 3  1   > 51  0
       *  AFTER 30JUN77     0  *            OTH   1   0  0  0  0  0  0  0  0  0   0     > 0  0   >  0  0
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                                                   SUMMARY OF COMPUTERS
    GROUP (                                      )
     MODEL     NUMBER    NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER  CORE CAP  ADDL     COMM PORTS
MFG  NO.       LEASED  PURCHASED     AVG    ****                  PERCENT                 *  TAPE    THOUSAND  STORAGE  ***********
           MFG  H-CO  MFG OTHR    HRS   NO  TYPE  N/0  10  20  30  40  50  60  70  80  90 100  DRIVES  OF CHARS  TYPE NO  BTCH INTRACT

HON 1250       0    0    1    0  >528    0  RES     0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     1       0
    ***************************  >352    0  ADM     0   0   0   0   0   0   0   1   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    1  INS     0   0   1   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77        1 *  >  0    0  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   1
    *  AFTER 30JUN77        0 *             OTH     0   1   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HON 1640       0    0    1    0  >528    1  RES     0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     0       1
    ***************************  >352    0  ADM     1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    0  INS     0   0   0   0   0   0   0   0   0   1   0  > 6  0  >151   0
    *  PRIOR 30JUN77        1 *  >  0    0  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
    *  AFTER 30JUN77        0 *             OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

HON 1642       1    1    0    0  >528    1  RES     2   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   2     0       2
    ***************************  >352    0  ADM     1   0   1   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    1  INS     0   0   0   0   0   0   0   0   1   0   1  > 6  0  >151   0
    *  PRIOR 30JUN77        2 *  >  0    0  H.ED    2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
    *  AFTER 30JUN77        0 *             OTH     1   1   0   0   0   0   0   0   0   0   0  > 0  2  >  0   1

HON 1646       0    0    3    0  >528    0  RES     0   3   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   3     0       3
    ***************************  >352    3  ADM     3   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    0  INS     0   0   0   0   0   0   0   0   0   3   0  > 6  0  >151   0
    *  PRIOR 30JUN77        3 *  >  0    0  H.ED    3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   3
    *  AFTER 30JUN77        0 *             OTH     3   0   0   0   0   0   0   0   0   0   0  > 0  3  >  0   0

HON 200        0    0    2    1  >528    0  RES     2   0   0   1   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     2       0
    ***************************  >352    2  ADM     0   1   0   0   0   0   1   0   0   0   1  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    0  INS     1   0   0   0   1   0   1   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77        3 *  >  0    1  H.ED    3   0   0   0   0   0   0   0   0   0   0  > 3  2  > 51   0
    *  AFTER 30JUN77        0 *             OTH     3   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   3

HON 2020       9    0    4    0  >528    0  RES     7   3   1   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  10     2       0
    ***************************  >352    0  ADM     1   0   0   1   0   3   0   1   1   1   3  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    6  INS     3   2   1   1   2   2   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77       11 *  >  0    4  H.ED   11   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   0
    *  AFTER 30JUN77        0 *             OTH     8   1   0   1   0   0   0   0   1   0   0  > 0  6  >  0  11

HON 2030       0    0    1    0  >528    0  RES     0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     0       0
    ***************************  >352    0  ADM     0   0   0   0   0   1   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    1  INS     0   0   0   0   0   1   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77        1 *  >  0    0  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
    *  AFTER 30JUN77        0 *             OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HON 2030A      1    1    2    0  >528    1  RES     1   2   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   3     0       0
    ***************************  >352    0  ADM     0   0   0   1   1   1   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    1  INS     0   0   0   0   0   1   1   1   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77        3 *  >  0    1  H.ED    3   0   0   0   0   0   0   0   0   0   0  > 3  2  > 51   1
    *  AFTER 30JUN77        0 *             OTH     3   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   2

HON 2032A      1    0    0    0  >528    0  RES     1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     0       0
    ***************************  >352    0  ADM     0   0   0   0   1   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    0  INS     0   0   0   0   0   0   1   0   0   0   0  > 6  0  >151   0
    *  PRICR 30JUN77        1 *  >  0    0  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
    *  AFTER 30JUN77        0 *             OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

HON 2040       0    0    2    0  >528    0  RES     2   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   2     0       0
    ***************************  >352    1  ADM     0   0   0   0   0   1   0   0   0   0   1  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    1  INS     1   0   0   0   0   1   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77        2 *  >  0    0  H.ED    2   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   2
    *  AFTER 30JUN77        0 *             OTH     2   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

HON 2040A      0    0    1    0  >528    0  RES     1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     0       0
    ***************************  >352    0  ADM     0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    0  INS     1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   1
    *  PRIOR 30JUN77        1 *  >  0    1  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   0
    *  AFTER 30JUN77        0 *             OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HON 2050       0    0    1    0  >528    0  RES     1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     0       1
    ***************************  >352    0  ADM     0   0   0   0   0   0   0   0   0   1   0  > 9  0  >251   1  OTH   0
    * INSTALLED:              *  >176    1  INS     0   1   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77        1 *  >  0    0  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   0
    *  AFTER 30JUN77        0 *             OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HON 21         0    0    0    1  >528    0  RES     1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0       1
    ***************************  >352    0  ADM     1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    0  INS     0   0   0   0   0   0   0   0   0   0   1  > 6  0  >151   0
    *  PRIOR 30JUN77        1 *  >  0    1  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77        0 *             OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

HON 2200       0    0    1    0  >528    0  RES     1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     0       1
    ***************************  >352    0  ADM     0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251   0  OTH   0
    * INSTALLED:              *  >176    1  INS     0   1   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77        1 *  >  0    0  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   0
    *  AFTER 30JUN77        0 *             OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0
```

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                                    SUMMARY OF COMPUTERS
     GROUP 1                              1

     MODEL    NUMBER    NUMBER    AVBLE/MO ************ PERCENT USAGE BY TYPE ************ NUMBER   CORE CAP   ADDL      COMM PORTS
MFG  NO.      LEASED   PURCHASED    AVG    ****                  PERCENT                 *  TAPE     THOUSAND   STORAGE   ***********
              MFG H-CO MFG OTHR  HRS   NO  TYPE N/0 10  20  30  4C  50  60  70  80 90 100  DRIVES   OF CHARS   TYPE NO   BTCH INTRACT

HON 435       0    0   1    0   >528   1   RES   0   0   1   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK  1     0       1
     **********************     >352   0   ADM   0   0   0   0   1   0   0   0   0  0   0  > 9  0   >251   0  OTH  0
     * INSTALLED:          *    >176   0   INS   0   0   0   0   1   0   0   0   0  0   0  > 6  0   >151   0
     *  PRIOR 30JUN77    1 *    >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  1   > 51   1
     *  AFTER 30JUN77    0 *               OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

HON 516       0    0   0    3   >528   1   RES   5   0   0   0   0   0   0   0   0  0   2  >12  0   >301   0  DSK  0     0       2
     **********************     >352   0   ADM   7   0   0   0   0   0   0   0   0  0   0  > 9  0   >251   0  OTH  0
     * INSTALLED:          *    >176   0   INS   4   0   0   0   0   0   0   0   0  0   3  > 6  0   >151   0
     *  PRIOR 30JUN77    7 *    >  0   2   H.ED  7   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
     *  AFTER 30JUN77    0 *               OTH   7   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   3

HON 530       1    0   0    0   >528   0   RES   0   1   0   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK  1     0       1
     **********************     >352   0   ADM   0   0   0   0   0   0   0   0   0  1   0  > 9  0   >251   0  OTH  0
     * INSTALLED:          *    >176   1   INS   0   1   0   0   0   0   0   0   0  0   0  > 6  0   >151   0
     *  PRIOR 30JUN77    1 *    >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
     *  AFTER 30JUN77    0 *               OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   1

HON 6/06      0    0   0    0   >528   1   RES   0   1   0   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK  0     1       1
     **********************     >352   0   ADM   0   0   1   0   0   0   0   0   0  0   0  > 9  0   >251   0  OTH  0
     * INSTALLED:          *    >176   0   INS   0   0   0   0   1   0   0   0   0  0   0  > 6  0   >151   0
     *  PRIOR 30JUN77    1 *    >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
     *  AFTER 30JUN77    0 *               OTH   0   0   0   1   0   0   0   0   0  0   0  > 0  0   >  0   1

HON 6/32      0    0   0    0   >528   0   RES   1   0   0   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK  0     0       0
     **********************     >352   0   ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0   >251   0  OTH  0
     * INSTALLED:          *    >176   0   INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0   >151   0
     *  PRICR 30JUN77    1 *    >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
     *  AFTER 30JUN77    0 *               OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

HON 6/36      0    0   1    0   >528   1   RES   1   0   0   0   0   0   0   0   0  0   0  >12  0   >301   1  DSK  1     0       1
     **********************     >352   0   ADM   0   0   0   1   0   0   0   0   0  0   0  > 9  0   >251   0  OTH  0
     * INSTALLED:          *    >176   0   INS   0   0   0   1   0   0   0   0   0  0   0  > 6  0   >151   0
     *  PRICR 30JUN77    1 *    >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
     *  AFTER 30JUN77    0 *               OTH   0   0   0   0   1   0   0   0   0  0   0  > 0  1   >  0   0

HON 6/43      0    0   1    0   >528   1   RES   1   0   0   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK  1     0       1
     **********************     >352   0   ADM   0   0   0   0   0   0   0   0   0  0   1  > 9  0   >251   0  OTH  0
     * INSTALLED:          *    >176   0   INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0   >151   0
     *  PRIOR 30JUN77    0 *    >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
     *  AFTER 30JUN77    1 *               OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   1

HON 60/40     1    0   0    0   >528   1   RES   0   1   0   0   0   0   0   0   0  0   0  >12  0   >301   1  DSK  1     1       1
     **********************     >352   0   ADM   0   0   0   0   0   0   0   0   0  1   0  > 9  0   >251   0  OTH  0
     * INSTALLED:          *    >176   0   INS   0   1   0   0   0   0   0   0   0  0   0  > 6  0   >151   0
     *  PRIOR 30JUN77    1 *    >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  1   > 51   0
     *  AFTER 30JUN77    0 *               OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

HON 6000      0    0   0    0   >528   0   RES   0   0   0   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK  0     0       0
     **********************     >352   0   ADM   0   0   0   0   0   0   0   0   0  0   0  > 9  0   >251   0  OTH  0
     * INSTALLED:          *    >176   0   INS   0   0   0   0   0   0   0   0   0  0   0  > 6  0   >151   0
     *  PRIOR 30JUN77    0 *    >  0   0   H.ED  0   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
     *  AFTER 30JUN77    0 *               OTH   0   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

HON 6023      1    0   2    0   >528   2   RES   1   2   0   0   0   0   0   0   0  0   0  >12  0   >301   2  DSK  3     3       3
     **********************     >352   0   ADM   0   0   0   0   0   1   0   1   0  1   0  > 9  0   >251   0  OTH  0
     * INSTALLED:          *    >176   0   INS   0   1   0   1   0   1   0   0   0  0   0  > 6  0   >151   0
     *  PRIOR 30JUN77    3 *    >  0   0   H.ED  3   0   0   0   0   0   0   0   0  0   0  > 3  1   > 51   1
     *  AFTER 30JUN77    0 *               OTH   3   0   0   0   0   0   0   0   0  0   0  > 0  2   >  0   0

HON 6031      1    0   0    0   >528   0   RES   1   0   0   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK  1     1       1
     **********************     >352   1   ADM   0   0   0   0   0   0   0   0   0  1   0  > 9  0   >251   0  OTH  0
     * INSTALLED:          *    >176   0   INS   0   1   0   0   0   0   0   0   0  0   0  > 6  0   >151   0
     *  PRIOR 30JUN77    1 *    >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   1
     *  AFTER 30JUN77    0 *               OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1   >  0   0

HON 6060      1    0   1    0   >528   1   RES   1   0   0   0   0   0   0   0   0  0   0  >12  0   >301   1  DSK  1     1       1
     **********************     >352   0   ADM   0   0   0   0   0   1   0   0   0  0   0  > 9  0   >251   0  OTH  0
     * INSTALLED:          *    >176   0   INS   0   0   0   0   0   1   0   0   0  0   0  > 6  0   >151   0
     *  PRIOR 30JUN77    1 *    >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  1   > 51   0
     *  AFTER 30JUN77    0 *               OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

HON 6080      1    0   0    0   >528   1   RES   0   0   1   0   0   0   0   0   0  0   0  >12  0   >301   1  DSK  1     1       1
     **********************     >352   0   ADM   0   0   0   0   0   0   1   0   0  0   0  > 9  0   >251   0  OTH  0
     * INSTALLED:          *    >176   0   INS   0   0   0   1   0   0   0   0   0  0   0  > 6  1   >151   0
     *  PRIOR 30JUN77    1 *    >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
     *  AFTER 30JUN77    0 *               OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

HON 6180      1    0   0    0   >528   1   RES   0   0   0   0   1   0   0   0   0  0   0  >12  0   >301   1  DSK  1     0       1
     **********************     >352   0   ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0   >251   0  OTH  0
     * INSTALLED:          *    >176   0   INS   0   0   1   0   0   0   0   0   0  0   0  > 6  0   >151   0
     *  PRICR 30JUN77    1 *    >  0   0   H.ED  0   1   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
     *  AFTER 30JUN77    0 *               OTH   0   0   0   1   0   0   0   0   0  0   0  > 0  0   >  0   0
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INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
            CONCUCTED BY THE COMPUTER SCIENCF DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA                    PAGE VII-23
                       UNDFR A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                         SUMMARY OF COMPUTERS

     GROUP (                                  )

    MODEL     NUMBER    NUMBER    AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER   CORE CAP   ADDL     CCMM PORTS
MFG  NO.      LEASED  PURCHASED    AVG     ****                PERCENT                  *   TAPE     THOUSAND   STORAGE  ***********
             MFG H-CO MFG OTHR   HRS   NO  TYPE N/O  10  20  30  40  50  60  70  80  90 100 DRIVES   OF CHARS   TYPE NC  BTCH INTRACT

HON 62/40     0    0    2    0  >528  1  RES   2   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   2     1       2
      ************************  >352  0  ADM   0   0   0   0   0   0   0   0   0   0   2  > 9  0  >251   0  OTH   0
      * INSTALLED:           *  >176  0  INS   2   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
      *   PRIOR 30JUN77    2 *  >  0  1  H.ED  2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   2
      *   AFTER 30JUN77    0 *           OTH   2   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HON 6200      1    0    0    0  >528  0  RES   1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     0       0
      ************************  >352  0  ADM   0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251   0  OTH   0
      * INSTALLED:           *  >176  1  INS   1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   1
      *   PRIOR 30JUN77    1 *  >  0  0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *   AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

HON 66/40     0    0    1    0  >528  0  RES   1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   1  DSK   1     1       1
      ************************  >352  1  ADM   0   0   0   0   0   0   0   0   0   0   1  > 9  1  >251   0  OTH   0
      * INSTALLED:           *  >176  0  INS   1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
      *   PRIOR 30JUN77    1 *  >  0  0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *   AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HON 66/60     1    0    1    0  >528  1  RES   0   0   0   1   0   0   0   0   0   0   0  >12  0  >301   1  DSK   1     1       1
      ************************  >352  0  ADM   0   0   0   0   1   0   0   0   0   0   0  > 9  1  >251   0  OTH   0
      * INSTALLED:           *  >176  0  INS   0   0   0   1   0   0   0   0   0   0   0  > 6  0  >151   0
      *   PRIOR 30JUN77    1 *  >  0  0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *   AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HON 68/80     1    0    1    0  >528  1  RES   0   0   0   1   0   0   0   0   0   0   0  >12  0  >301   1  DSK   1     1       1
      ************************  >352  0  ADM   0   0   1   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:           *  >176  0  INS   0   0   0   0   0   1   0   0   0   0   0  > 6  0  >151   0
      *   PRICR 30JUN77    1 *  >  0  0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   0
      *   AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

HON 701       2    0    0    0  >528  0  RES   0   2   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     2       0
      ************************  >352  2  ADM   0   0   0   2   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:           *  >176  0  INS   0   0   0   0   0   0   2   0   0   0   0  > 6  0  >151   0
      *   PRIOR 30JUN77    2 *  >  0  0  H.ED  2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *   AFTER 30JUN77    0 *           OTH   2   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   2

HON 725G      1    0    0    0  >528  1  RES   0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     1       0
      ************************  >352  0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:           *  >176  0  INS   0   0   0   0   0   0   0   0   0   1   0  > 6  0  >151   0
      *   PRIOR 30JUN77    1 *  >  0  0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *   AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

IBM           2    0    0    0  >528  0  RES   3   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     1       1
      ************************  >352  0  ADM   2   0   0   0   0   0   0   0   1   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:           *  >176  0  INS   2   0   1   0   0   0   0   0   0   0   0  > 6  0  >151   1
      *   PRICR 30JUN77    3 *  >  0  1  H.ED  3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *   AFTER 30JUN77    0 *           OTH   3   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

IBM SER/1     0    0    1    0  >528  0  RES   0   0   1   0   0   0   0   0   0   0   0  >12  0  >301   0  CSK   1     1       1
      ************************  >352  0  ADM   0   1   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  CTH   1
      * INSTALLED:           *  >176  1  INS   0   0   0   0   0   0   0   0   1   0   0  > 6  0  >151   0
      *   PRICR 30JUN77    0 *  >  0  0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
      *   AFTER 30JUN77    1 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

IBM SYS10     1    0    0    0  >528  0  RES   1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     1       0
      ************************  >352  0  ADM   0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251   0  CTH   0
      * INSTALLED:           *  >176  0  INS   1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
      *   PRIOR 30JUN77    1 *  >  0  1  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
      *   AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

IBM SYS3     13    0    8    2  >528  1  RES  17   5   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  21     9       3
      ************************  >352  0  ADM   3   1   1   0   2   1   0   2   1   4   7  > 9  0  >251   1  CTH   0
      * INSTALLED:           *  >176 10  INS   7   4   3   0   0   1   1   1   1   1   3  > 6  0  >151   1
      *   PRIOR 30JUN77   21 *  >  0  9  H.ED 21   0   0   0   0   0   0   0   1   0   0  > 3  0  > 51   2
      *   AFTER 30JUN77    1 *           OTH  20   1   0   1   0   0   0   0   0   0   0  > 0  2  >  0  16

IBM SYS3/10  16    2   17    1  >528  2  RES  20   7   2   1   0   1   0   0   0   0   0  >12  0  >301   0  DSK  28    14       1
      ************************  >352  0  ADM   2   2   0   2   2   8   1   5   3   3   3  > 9  0  >251   0  OTH   0
      * INSTALLED:           *  >176 11  INS   5   3   5   5   4   2   2   2   0   1   2  > 6  0  >151   0
      *   PRIOR 30JUN77   31 *  >  0 17  H.ED 31   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
      *   AFTER 30JUN77    0 *           OTH  28   1   0   1   0   0   1   0   0   0   0  > 0  3  >  0  28

IBM SYS3/12   1    0    0    0  >528  0  RES   1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     1       1
      ************************  >352  0  ADM   0   0   0   1   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:           *  >176  1  INS   0   0   0   0   0   0   0   1   0   0   0  > 6  0  >151   0
      *   PRIOR 30JUN77    1 *  >  0  0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
      *   AFTER 30JUN77    0 *           OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

IBM SYS3/15   2    0    0    1  >528  0  RES   2   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   3     1       1
      ************************  >352  0  ADM   0   0   0   0   0   0   2   0   0   0   1  > 9  0  >251   0  OTH   0
      * INSTALLED:           *  >176  1  INS   1   0   0   1   1   0   0   0   0   0   0  > 6  0  >151   0
      *   PRIOR 30JUN77    2 *  >  0  2  H.ED  3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   2
      *   AFTER 30JUN77    1 *           OTH   2   1   0   0   0   0   0   0   0   0   0  > 0  1  >  0   1
```

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                                           SUMMARY OF COMPUTERS
   GROUP I                            )

     MODEL   NUMBER    NUMBER    AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER    CORE CAP   ADDL      COMM PORTS
MFG  NO.     LEASED  PURCHASED     AVG    ****                 PERCENT                *   TAPE      THOUSAND   STORAGE   ***********
            MFG M-CO MFG OTHR  HRS    NO  TYPE N/O  10  20  30  40  50  60  70  80  90 100  DRIVES    OF CHARS   TYPE NO   BTCH INTRACT

IBM SYS3/7    0   0   1   0  >528   1  RES   1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0      1
    ***********************  >352   0  ADM   0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251   0  OTH   0
    * INSTALLED:          *  >176   0  INS   1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77    1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77    0 *            OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

IBM SYS3/8    2   0   0   0  >528   0  RES   2   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   2     2      1
    ***********************  >352   0  ADM   1   0   0   0   0   1   0   0   0   1   0  > 9  0  >251   0  OTH   0
    * INSTALLED:          *  >176   0  INS   1   1   1   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77    3 *  >  0   2  H.ED  3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77    0 *            OTH   2   0   1   0   0   0   0   0   0   0   0  > 0  0  >  0   2

IBM SYS32    11   0   0   0  >528   1  RES  10   2   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   9     5      1
    ***********************  >352   1  ADM   2   1   0   0   0   2   2   0   1   0   4  > 9  0  >251   0  OTH   3
    * INSTALLED:          *  >176   3  INS   6   1   0   1   1   1   0   0   0   0   2  > 6  0  >151   0
    *  PRIOR 30JUN77   11 *  >  0   5  H.ED 12   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77    1 *            OTH  11   0   0   0   0   1   0   0   0   0   0  > 0  1  >  0   9

IBM SYS7      3   0   3   0  >528   5  RES   4   0   0   0   0   0   0   0   0   1   0  >12  0  >301   0  DSK   3     1      3
    ***********************  >352   0  ADM   0   1   0   0   0   0   0   0   0   0   4  > 9  0  >251   0  CTH   0
    * INSTALLED:          *  >176   0  INS   4   1   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77    5 *  >  0   0  H.ED  5   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
    *  AFTER 30JUN77    0 *            OTH   5   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   4

IBM 1130     34   3  77  16  >528   9  RES  66  34   1   4   0   2   0   0   0   1   6  >12  0  >301   0  DSK  93    49     10
    ***********************  >352  10  ADM  30   7   5   8   7  17   8   6   8  11   7  > 9  0  >251   0  OTH   3
    * INSTALLED:          *  >176  63  INS  21  13   6   8  14  14   5   9   2  11  11  > 6  0  >151   1
    *  PRIOR 30JUN77  112 *  >  0  20  H.ED111   3   0   0   0   0   0   0   0   0   0  > 3  0  > 51   4
    *  AFTER 30JUN77    2 *            OTH 107   5   2   0   0   0   0   0   0   0   0  > 0  4  >  0  55

IBM 1131      0   0   2   0  >529   1  RES   1   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   2     1      0
    ***********************  >352   0  ADM   1   0   1   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:         **  >176   0  INS   0   0   0   0   0   0   0   0   1   0   1  > 6  0  >151   0
    *  PRIOR 30JUN77    2 *  >  0   1  H.ED  2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77    0 *            OTH   2   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   2

IBM 1401      2   0   7   3  >529   4  RES  11   0   0   0   0   0   0   0   0   0   1  >12  0  >301   0  DSK   5     5      0
    ***********************  >352   1  ADM   5   0   0   1   0   2   0   0   1   0   3  > 9  0  >251   0  OTH   0
    * INSTALLED:          *  >176   3  INS   4   1   1   0   0   2   0   0   1   0   3  > 6  0  >151   0
    *  PRIOR 30JUN77   12 *  >  0   4  H.ED 12   0   0   0   0   0   0   0   0   0   0  > 3  2  > 51   0
    *  AFTER 30JUN77    0 *            OTH  12   0   0   0   0   0   0   0   0   0   0  > 0  7  >  0   9

IBM 1500      0   0   0   1  >528   0  RES   1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0      1
    ***********************  >352   1  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:          *  >176   0  INS   0   0   0   0   0   0   0   0   0   0   1  > 6  0  >151   0
    *  PRIOR 30JUN77    1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77    0 *            OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

IBM 1620      3   0   9   5  >528   0  RES  16   2   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   8     4      0
    ***********************  >352   0  ADM   9   0   0   0   0   3   2   0   0   1   3  > 9  0  >251   0  OTH   0
    * INSTALLED:          *  >176   5  INS   7   1   0   1   1   3   0   0   0   0   5  > 6  0  >151   0
    *  PRIOR 30JUN77   18 *  >  0   9  H.ED 18   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77    0 *            OTH  18   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  14

IBM 1800      3   0  11   0  >528   9  RES   4   2   0   0   0   0   0   0   2   2   2  >12  0  >301   1  DSK  12     3      6
    ***********************  >352   0  ADM   3   3   1   0   1   1   0   0   0   0   3  > 9  0  >251   0  OTH   0
    * INSTALLED:          *  >176   3  INS   8   0   1   0   0   2   0   0   0   1   0  > 6  0  >151   0
    *  PRIOR 30JUN77   12 *  >  0   0  H.ED 12   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   5
    *  AFTER 30JUN77    0 *            OTH  12   0   0   0   0   0   0   0   0   0   0  > 0  6  >  0   6

IBM 2040      0   0   1   0  >528   1  RES   0   0   0   0   0   0   0   0   0   0   1  >12  0  >301   0  DSK   1     0      1
    ***********************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   1  OTH   0
    * INSTALLED:          *  >176   0  INS   1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77    1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77    0 *            OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

IBM 2044      0   0   2   0  >528   1  RES   0   0   0   1   0   0   0   0   0   0   1  >12  0  >301   0  DSK   2     2      0
    ***********************  >352   1  ADM   1   0   0   1   0   0   0   0   0   0   0  > 9  0  >251   2  OTH   0
    * INSTALLED:          *  >176   0  INS   1   0   0   0   0   1   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77    2 *  >  0   0  H.ED  2   0   0   0   0   0   0   0   0   0   0  > 3  2  > 51   0
    *  AFTER 30JUN77    0 *            OTH   2   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

IBM 2050H     1   0   1   1  >528   0  RES   0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   1  DSK   1     0      0
    ***********************  >352   0  ADM   0   0   0   0   0   0   1   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:          *  >176   0  INS   0   0   0   1   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77    1 *  >  0   1  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   0
    *  AFTER 30JUN77    0 *            OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

IBM 2922      0   0   0   0  >528   0  RES   1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0      1
    ***********************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  CTH   0
    * INSTALLED:          *  >176   1  INS   1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77    1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77    0 *            OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0
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                                                    SUMMARY OF COMPUTERS

   GROUP (                           )

     MODEL    NUMBER    NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER    CORE CAP   ADDL      COMM PORTS
MFG  NO.      LEASED  PURCHASED    AVG     ****                PERCENT                  *  TAPE      THOUSAND   STORAGE   ***********
             MFG H-CO MFG OTHR HRS    NO   TYPE N/O 10  20  30  40  50  60  70  80 90 100  DRIVES    OF CHARS   TYPE NO   BTCH INTRACT

IBM 3115       1    0    1    0 >528   0   RES   0   0   1   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK   1     0      0
    ***********************     >352   0   ADM   0   0   0   0   1   0   0   0   0  0   0  > 9  0   >251   0  OTH   0
    * INSTALLED:              * >176   1   INS   0   0   0   0   0   1   0   0   0  0   0  > 6  0   >151   1
    *   PRIOR 30JUN77       1 * >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
    *   AFTER 30JUN77       0 *                OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1   >  0   0

IBM 3125       3    0    0    0 >528   0   RES   2   1   0   0   0   0   0   0   0  0   0  >12  0   >301   1  DSK   3     1      3
    ***********************     >352   0   ADM   0   0   0   0   1   1   0   0   0  1   0  > 9  0   >251   2  OTH   0
    * INSTALLED:              * >176   3   INS   0   1   0   0   1   0   1   0   0  0   0  > 6  0   >151   0
    *   PRIOR 30JUN77       3 * >  0   0   H.ED  3   0   0   0   0   0   0   0   0  0   0  > 3  1   > 51   0
    *   AFTER 30JUN77       0 *                OTH   3   0   0   0   0   0   0   0   0  0   0  > 0  2   >  0   0

IBM 3138       1    0    0    0 >528   0   RES   1   0   0   0   0   0   0   0   0  0   0  >12  0   >301   1  DSK   1     1      1
    ***********************     >352   0   ADM   0   0   0   0   1   0   0   0   0  0   0  > 9  0   >251   0  OTH   0
    * INSTALLED:              * >176   1   INS   0   0   0   0   0   0   1   0   0  0   0  > 6  0   >151   0
    *   PRIOR 30JUN77       0 * >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
    *   AFTER 30JUN77       1 *                OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1   >  0   0

IBM 3145       0    1    1    0 >528   1   RES   1   0   0   0   0   0   0   0   0  0   0  >12  0   >301   1  DSK   1     0      0
    ***********************     >352   0   ADM   0   0   0   0   0   0   0   0   1  0   0  > 9  0   >251   0  OTH   0
    * INSTALLED:              * >176   0   INS   0   0   1   0   0   0   0   0   0  0   0  > 6  0   >151   0
    *   PRIOR 30JUN77       1 * >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  1   > 51   0
    *   AFTER 30JUN77       0 *                OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

IBM 3148       1    0    1    0 >528   0   RES   1   0   0   0   0   0   0   0   0  0   0  >12  0   >301   1  DSK   1     0      0
    ***********************     >352   0   ADM   0   0   0   0   0   0   0   0   0  0   1  > 9  0   >251   0  OTH   0
    * INSTALLED:              * >176   0   INS   1   0   0   0   0   0   0   0   0  0   0  > 6  1   >151   0
    *   PRIOR 30JUN77       0 * >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
    *   AFTER 30JUN77       1 *                OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

IBM 3155       1    1    1    0 >528   0   RES   1   0   0   0   0   0   0   0   0  0   0  >12  0   >301   1  DSK   1     0      1
    ***********************     >352   0   ADM   0   0   0   0   0   0   0   0   0  0   1  > 9  0   >251   0  OTH   0
    * INSTALLED:              * >176   1   INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0   >151   0
    *   PRIOR 30JUN77       1 * >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  1   > 51   0
    *   AFTER 30JUN77       0 *                OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

IBM 3158       1    0    0    0 >528   0   RES   1   0   0   0   0   0   0   0   0  0   0  >12  0   >301   1  DSK   1     0      0
    ***********************     >352   0   ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0   >251   0  OTH   0
    * INSTALLED:              * >176   0   INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0   >151   0
    *   PRIOR 30JUN77       1 * >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  1   > 51   0
    *   AFTER 30JUN77       0 *                OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

IBM 3168       1    1    1    0 >528   1   RES   0   0   0   0   1   0   0   0   0  0   0  >12  0   >301   1  DSK   1     1      1
    ***********************     >352   0   ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0   >251   0  OTH   1
    * INSTALLED:              * >176   0   INS   0   0   1   0   0   0   0   0   0  0   0  > 6  1   >151   0
    *   PRIOR 30JUN77       1 * >  0   0   H.ED  0   0   0   0   1   0   0   0   0  0   0  > 3  0   > 51   0
    *   AFTER 30JUN77       0 *                OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

IBM 360/       1    2    0    3 >528   0   RES   2   2   1   0   0   0   0   0   0  0   2  >12  0   >301   0  DSK   4     1      0
    ***********************     >352   0   ADM   3   0   0   0   1   1   0   1   0  0   1  > 9  0   >251   0  OTH   0
    * INSTALLED:              * >176   4   INS   3   0   0   1   1   1   0   0   0  1   0  > 6  0   >151   0
    *   PRIOR 30JUN77       7 * >  0   0   H.ED  7   0   0   0   0   0   0   0   0  0   0  > 3  1   > 51   2
    *   AFTER 30JUN77       0 *                OTH   6   1   0   0   0   0   0   0   0  0   0  > 0  2   >  0   2

IBM 360/20     7    1   14    3 >528   3   RES  15   3   0   0   0   0   0   4   0  0   0  >12  0   >301   0  DSK   6     5      0
    ***********************     >352   5   ADM   6   0   1   1   1   1   3   1   0  0  10  > 9  0   >251   0  OTH   1
    * INSTALLED:              * >176   5   INS  10   0   0   5   3   1   0   2   1  0   0  > 6  0   >151   0
    *   PRIOR 30JUN77      21 * >  0   9   H.ED 22   0   0   0   0   0   0   0   0  0   0  > 3  1   > 51   0
    *   AFTER 30JUN77       1 *                OTH  22   0   0   0   0   0   0   0   0  0   0  > 0  2   >  0  20

IBM 360/22     5    0    2    2 >528   2   RES   5   2   0   0   0   0   0   1   0  0   0  >12  0   >301   0  DSK   4     3      0
    ***********************     >352   2   ADM   2   0   0   0   1   2   0   0   0  1   2  > 9  0   >251   0  OTH   0
    * INSTALLED:              * >176   2   INS   3   0   1   1   0   1   1   0   0  0   1  > 6  0   >151   0
    *   PRIOR 30JUN77       8 * >  0   2   H.ED  7   1   0   0   0   0   0   0   0  0   0  > 3  1   > 51   1
    *   AFTER 30JUN77       0 *                OTH   7   0   0   1   0   0   0   0   0  0   0  > 0  4   >  0   6

IBM 360/25     2    0    1    0 >528   0   RES   3   0   0   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK   3     1      0
    ***********************     >352   1   ADM   1   0   0   0   1   0   0   0   0  1   0  > 9  0   >251   0  OTH   0
    * INSTALLED:              * >176   2   INS   0   1   0   0   0   0   1   0   0  0   1  > 6  0   >151   0
    *   PRIOR 30JUN77       3 * >  0   0   H.ED  3   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
    *   AFTER 30JUN77       0 *                OTH   3   0   0   0   0   0   0   0   0  0   0  > 0  1   >  0   3

IBM 360/30     9   10   13   20 >528   7   RES  29  10   1   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK  34     8      2
    ***********************     >352  10   ADM   7   1   1   1   7   8   4   2   2  1   6  > 9  0   >251   1  OTH   1
    * INSTALLED:              * >176  18   INS   9   4   0   2   4  10   5   1   0  1   4  > 6  0   >151   1
    *   PRIOR 30JUN77      39 * >  0   3   H.ED 40   0   0   0   0   0   0   0   0  0   0  > 3 10   > 51  32
    *   AFTER 30JUN77       1 *                OTH  39   0   0   0   0   0   1   0   0  0   0  > 0 21   >  0   4

IBM 360/40     8    7   18   15 >528   8   RES  19   7   1   2   0   0   0   1   0  0   0  >12  0   >301   5  DSK  29     9      9
    ***********************     >352  12   ADM   1   2   0   3   7   1   2   5   0  1   8  > 9  0   >251  20  OTH   0
    * INSTALLED:              * >176   6   INS  10   3   2   5   3   3   2   1   1  0   0  > 6  0   >151   3
    *   PRIOR 30JUN77      29 * >  0   2   H.ED 30   0   0   0   0   0   0   0   0  0   0  > 3 10   > 51   1
    *   AFTER 30JUN77       1 *                OTH  24   2   1   0   3   0   0   0   0  0   0  > 0 17   >  0   0
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SUMMARY OF COMPUTERS

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    GROUP (                             )

    MODEL    NUMBER   NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************ NUMBER  CORE CAP   ADDL     COMM PORTS
MFG NO.      LEASED  PURCHASED   AVG    ****                PERCENT                  *  TAPE    THOUSAND   STORAGE  ***********
             MFG H-CO MFG OTHR HRS   NO TYPE N/0 10  20  30  40  50  60  70  80 90 100  DRIVES  OF CHARS   TYPE NO  BTCH INTRACT

IBM 360/44    1   0   5   0  >528   3  RES    1  0   1   0   0   0   0   0   2  0   1  >12  0  >301   0  DSK  4     2       1
     ***********************  >352   1  ADM    1  3   0   1   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:           *  >176   1  INS    1  1   1   0   0   1   0   0   0  0   1  > 6  0  >151   0
     *   PRIOR 30JUN77   5 *  >  0   0  H.ED   5  0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   4
     *   AFTER 30JUN77   0 *            OTH    4  1   0   0   0   C   0   0   0  0   0  > 0  3  >  0   0

IBM 360/50    3   4   9   2  >528   6  RES    5  3   0   2   0   1   1   0   0  0   0  >12  0  >301  11  DSK 12     7       5
     ***********************  >352   5  ADM    0  1   0   1   2   3   1   0   1  1   2  > 9  0  >251   1  OTH  0
     * INSTALLED:           *  >176   0  INS    2  2   2   2   1   3   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77  12 *  >  0   1  H.ED  11  1   0   0   0   0   0   0   0  0   0  > 3  7  > 51   0
     *   AFTER 30JUN77   0 *            OTH   10  2   0   0   0   0   0   0   0  0   0  > 0  5  >  0   0

IBM 360/65    2   3   7   5  >528   8  RES    4  1   3   1   0   1   1   0   0  0   1  >12  0  >301  10  DSK 10     8       8
     ***********************  >352   2  ADM    4  1   1   2   1   1   0   1   0  0   1  > 9  1  >251   0  OTH  1
     * INSTALLED:           *  >176   2  INS    4  2   1   1   3   0   1   0   0  0   0  > 6  2  >151   0
     *   PRIOR 30JUN77  12 *  >  0   0  H.ED  10  2   0   0   0   0   0   0   0  0   0  > 3  7  > 51   0
     *   AFTER 30JUN77   0 *            OTH    6  5   0   1   0   0   0   0   0  0   0  > 0  1  >  0   1

IBM 360/67    2   0   4   1  >528   3  RES    1  0   1   0   2   0   0   0   0  0   1  >12  0  >301   5  DSK  5     4       5
     ***********************  >352   2  ADM    2  0   1   1   1   0   0   0   0  0   0  > 9  1  >251   0  OTH  2
     * INSTALLED:           *  >176   0  INS    2  0   0   1   1   1   0   0   0  0   0  > 6  2  >151   0
     *   PRIOR 30JUN77   4 *  >  0   0  H.ED   5  0   0   0   0   0   0   0   0  0   0  > 3  2  > 51   0
     *   AFTER 30JUN77   1 *            OTH    4  1   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

IBM 360/75    0   1   5   0  >528   4  RES    0  1   1   1   1   0   1   0   1  0   0  >12  1  >301   6  DSK  4     3       3
     ***********************  >352   1  ADM    2  0   1   0   1   2   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:           *  >176   0  INS    0  1   3   0   1   0   0   0   1  0   0  > 6  0  >151   0
     *   PRICR 30JUN77   6 *  >  0   1  H.ED   6  0   0   0   0   0   0   0   0  0   0  > 3  2  > 51   0
     *   AFTER 30JUN77   0 *            OTH    5  1   0   0   0   0   0   0   0  0   0  > 0  1  >  0   0

IBM 360/91    2   0   5   1  >528   4  RES    1  0   0   1   2   0   1   0   0  0   0  >12  1  >301   5  DSK  4     4       2
     ***********************  >352   0  ADM    2  1   1   0   1   0   0   0   0  0   0  > 9  1  >251   0  OTH  2
     * INSTALLED:           *  >176   0  INS    2  1   0   1   0   1   0   0   0  0   0  > 6  1  >151   0
     *   PRICR 30JUN77   5 *  >  0   0  H.ED   3  2   0   0   0   0   0   0   0  0   0  > 3  1  > 51   0
     *   AFTER 30JUN77   0 *            OTH    1  3   1   0   0   0   0   0   0  0   0  > 0  0  >  0   0

IBM 370/115 13    1   3   0  >528   1  RES   12  2   0   0   0   0   0   0   1  0   0  >12  0  >301   1  DSK 15     6       9
     ***********************  >352   1  ADM    0  0   2   0   2   2   1   2   2  0   4  > 9  0  >251   5  OTH  0
     * INSTALLED:           *  >176  10  INS    4  1   2   2   3   1   1   0   1  0   0  > 6  0  >151   8
     *   PRICR 30JUN77  15 *  >  0   3  H.ED  15  0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   1
     *   AFTER 30JUN77   0 *            OTH   14  0   1   0   0   0   0   0   0  0   0  > 0 14  >  0   0

IBM 370/125 19    1   9   2  >528   3  RES   13  9   0   2   0   C   0   0   0  0   1  >12  0  >301   5  DSK 24    11      14
     ***********************  >352   7  ADM    3  1   0   4   3   6   5   1   1  0   1  > 9  0  >251  11  OTH  0
     * INSTALLED:           *  >176  11  INS    4  2   0   4   5   4   5   0   0  1   0  > 6  0  >151   7
     *   PRIOR 30JUN77  24 *  >  0   3  H.ED  24  1   0   0   0   0   0   0   0  0   0  > 3  3  > 51   1
     *   AFTER 30JUN77   1 *            OTH   20  3   1   0   1   0   0   0   0  0   0  > 0 20  >  0   0

IBM 370/130  0    0   0   1  >528   0  RES    1  0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  0     0       0
     ***********************  >352   0  ADM    0  0   0   0   0   0   0   0   1  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:           *  >176   0  INS    0  0   1   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   1 *  >  0   1  H.ED   1  0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *            OTH    1  0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

IBM 370/135 19    3  10   3  >528   9  RES   14 12   3   0   0   0   0   0   0  0   0  >12  0  >301  19  DSK 29    19      22
     ***********************  >352   8  ADM    0  1   2   1   3   7   3   1   3  5   3  > 9  0  >251   2  OTH  0
     * INSTALLED:           *  >176  11  INS    7  4   3   3   4   5   1   2   0  0   0  > 6  0  >151   5
     *   PRIOR 30JUN77  27 *  >  0   0  H.ED  26  3   0   0   0   0   0   0   0  0   0  > 3  5  > 51   3
     *   AFTER 30JUN77   2 *            OTH   19  5   2   2   1   0   0   0   0  0   0  > 0 24  >  0   0

IBM 370/138 14    2   6   2  >528   8  RES   16  5   0   0   0   0   0   0   0  0   0  >12  0  >301  20  DSK 20    12      14
     ***********************  >352   4  ADM    2  0   0   1   2   2   2   3   1  2   6  > 9  0  >251   0  OTH  0
     * INSTALLED:           *  >176   7  INS    9  1   2   4   1   1   2   1   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77  17 *  >  0   0  H.ED  20  1   0   0   0   0   0   0   0  0   0  > 3  7  > 51   0
     *   AFTER 30JUN77   4 *            OTH   18  3   0   0   0   0   0   0   0  0   0  > 0 12  >  0   0

IBM 370/145 13    5  10   5  >528  10  RES   13  7   2   4   0   0   0   0   0  0   0  >12  0  >301  23  DSK 26    16      19
     ***********************  >352   8  ADM    2  0   1   3   2   3   4   2   1  1   7  > 9  0  >251   3  CTH  0
     * INSTALLED:           *  >176   3  INS   11  2   2   4   4   1   1   1   0  0   0  > 6  1  >151   0
     *   PRIOR 30JUN77  23 *  >  0   4  H.ED  23  0   2   1   C   0   0   0   0  0   0  > 3 14  > 51   0
     *   AFTER 30JUN77   3 *            OTH   23  2   0   0   0   0   0   0   0  0   1  > 0 11  >  0   0

IBM 370/148 13    0   3   0  >528   6  RES   10  0   3   1   0   0   0   0   0  0   0  >12  0  >301  14  DSK 14    10      13
     ***********************  >352   3  ADM    3  0   1   0   1   2   0   0   0  1   6  > 9  0  >251   0  OTH  0
     * INSTALLED:           *  >176   0  INS    9  1   1   1   0   1   0   1   0  0   0  > 6  4  >151   0
     *   PRIOR 30JUN77   7 *  >  0   0  H.ED  14  0   0   0   0   0   0   0   0  0   0  > 3  6  > 51   0
     *   AFTER 30JUN77   7 *            OTH   12  2   0   0   0   0   0   0   0  0   0  > 0  3  >  0   0

IBM 370/155  1    3   4   2  >528   5  RES    5  0   1   0   0   1   2   0   1  0   0  >12  0  >301  10  DSK  9     7      10
     ***********************  >352   3  ADM    4  1   0   0   0   2   0   0   1  0   2  > 9  1  >251   0  OTH  0
     * INSTALLED:           *  >176   0  INS    2  0   3   1   1   1   1   0   0  0   1  > 6  1  >151   0
     *   PRIOR 30JUN77   9 *  >  0   1  H.ED   9  1   0   0   0   0   0   0   0  0   0  > 3  3  > 51   0
     *   AFTER 30JUN77   1 *            OTH    9  1   0   0   0   0   0   0   0  0   0  > 0  3  >  0   0
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                                                       SUMMARY OF COMPUTERS

     GROUP I                                    )
      MODEL     NUMBER    NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER    CORE CAP   ADDL      COMM PORTS
MFG   NO.       LEASED   PURCHASEC    AVG    ****                 PERCENT                 *  TAPE      THOUSAND   STORAGE   ***********
               MFG H-CO  MFG CTHR  HRS   NO  TYPE N/O  10  20  30  40  50  60  70  80  90 100  DRIVES    OF CHARS   TYPE NO   BTCH INTRACT

IBM 370/158 11    4  19  10  >528  23  RES    9   3   1   6   9   1   0   2   0   0   0  >12  3  >301  30  DSK  29    27      30
      *********************  >352   4  ADM    3   4   7   1   4   4   0   3   1   2   2  > 9  0  >251   0  OTH   1
      * INSTALLED:        *  >176   2  INS    7   2   7   6   6   0   1   1   0   1   0  > 6  8  >151   0
      *  PRIOR 30JUN77 31 *  >  0   1  H.ED  28   1   1   0   0   1   0   0   0   0   0  > 3 13  > 51   0
      *  AFTER 30JUN77  0 *            OTH   25   5   1   0   0   0   0   0   0   0   0  > 0  4  >  0   0

IBM 370/168  1    0   7   0  >528   8  RES    1   1   1   0   1   2   0   0   0   0   2  >12  4  >301   7  DSK   8     7       7
      *********************  >352   0  ADM    4   1   1   0   1   1   0   0   0   0   0  > 9  1  >251   0  OTH   1
      * INSTALLED:        *  >176   0  INS    4   1   1   0   0   2   0   0   0   0   0  > 6  2  >151   0
      *  PRIOR 30JUN77  8 *  >  0   0  H.ED   6   1   0   0   0   0   0   0   1   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77  0 *            OTH    6   1   1   0   0   0   0   0   0   0   0  > 0  0  >  0   1

IBM 370/198  1    0   0   0  >528   0  RES    0   0   1   0   0   0   0   0   0   0   0  >12  0  >301   1  DSK   1     0       1
      *********************  >352   0  ADM    0   0   0   0   0   1   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:        *  >176   1  INS    0   0   0   0   1   0   0   0   0   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77  1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77  0 *            OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

IBM 370/252  1    0   0   0  >528   1  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   1  DSK   1     1       1
      *********************  >352   0  ADM    0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251   0  OTH   0
      * INSTALLED:        *  >176   0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77  0 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   0
      *  AFTER 30JUN77  1 *            OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

IBM 370/55   0    0   0   0  >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0       0
      *********************  >352   1  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:        *  >176   0  INS    0   0   0   0   0   0   0   0   0   0   1  > 6  0  >151   0
      *  PRIOR 30JUN77  1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77  0 *            OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

IBM 3775     1    0   0   0  >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0       0
      *********************  >352   0  ADM    0   0   0   0   0   0   0   1   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:        *  >176   1  INS    0   0   0   1   0   0   0   0   0   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77  1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77  0 *            OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

IBM 3776     1    0   0   0  >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0       0
      *********************  >352   0  ADM    0   0   1   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:        *  >176   0  INS    0   0   0   0   0   0   0   0   1   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77  1 *  >  0   1  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77  0 *            OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

IBM 3777     1    0   0   0  >528   1  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0       0
      *********************  >352   0  ADM    0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251   0  OTH   0
      * INSTALLED:        *  >176   0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
      *  PRICR 30JUN77  1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77  0 *            OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

IBM 3780     3    0   1   0  >528   0  RES    3   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0       0
      *********************  >352   0  ADM    0   0   1   0   0   3   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:        *  >176   3  INS    0   0   0   0   0   3   1   0   0   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77  4 *  >  0   1  H.ED   4   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77  0 *            OTH    4   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

IBM 5000     0    0   0   0  >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0       0
      *********************  >352   0  ADM    0   0   0   0   0   1   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:        *  >176   0  INS    0   0   0   0   0   1   0   0   0   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77  1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77  0 *            OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

IBM 5100     1    0   9   0  >528   1  RES    5   3   2   0   0   0   0   0   0   1   1  >12  0  >301   0  DSK   1     1       3
      *********************  >352   4  ADM    6   2   0   0   0   1   0   0   0   0   3  > 9  0  >251   0  OTH   1
      * INSTALLED:        *  >176   3  INS    5   1   0   0   1   0   0   1   0   2   2  > 6  0  >151   1
      *  PRIOR 30JUN77 11 *  >  0   2  H.ED  12   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77  1 *            OTH   11   1   0   0   0   0   0   0   0   0   0  > 0  3  >  0   5

IBM 5320     2    0   0   0  >528   0  RES    2   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     2       1
      *********************  >352   0  ADM    0   1   0   0   0   0   0   0   0   0   1  > 9  0  >251   0  OTH   0
      * INSTALLED:        *  >176   1  INS    1   0   0   0   0   0   0   0   0   1   0  > 6  0  >151   0
      *  PRIOR 30JUN77  1 *  >  0   1  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
      *  AFTER 30JUN77  1 *            OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

IBM 7044     1    0   1   1  >528   1  RES    0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     1       0
      *********************  >352   0  ADM    0   0   0   0   0   1   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:        *  >176   0  INS    0   0   1   0   0   0   0   0   0   0   0  > 6  0  >151   1
      *  PRIOR 30JUN77  1 *  >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   0
      *  AFTER 30JUN77  0 *            OTH    0   0   1   0   0   0   0   0   0   0   0  > 0  0  >  0   0

IBM 7090     0    0   0   1  >528   0  RES    0   0   0   0   0   1   0   0   0   0   0  >12  0  >301   0  DSK   0     1       0
      *********************  >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
      * INSTALLED:        *  >176   0  INS    0   0   0   0   0   1   0   0   0   0   0  > 6  1  >151   1
      *  PRIOR 30JUN77  1 *  >  0   1  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77  0 *            OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0
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                                                  SUMMARY OF COMPUTERS
      GROUP (                                 )

     MODEL     NUMBER    NUMBER   AVBLF/MO ************ PERCENT USAGE BY TYPE ************   NUMBER   CORE CAP   ADDL      COMM PORTS
MFG  NO.       LEASED  PURCHASED    AVG    ****                 PERCENT                  *   TAPE    THOUSAND   STORAGE   ***********
              MFG H-CO MFG CTHR   HRS   NO TYPE N/O  10  20  30  40  50  60  70  80  90 100  DRIVES   OF CHARS   TYPE NO   BTCH INTRACT

IBM 7094       0    0    1    0  >528   1  RES    0   0   0   0   0   0   0   0   0   0   1  >12  0  >301  0   DSK  0     1      0
     ***********************     >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  1  >251  0   OTH  0
     * INSTALLED:          *     >176   0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151  1
     *  PRIOR 30JUN77    1 *     >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
     *  AFTER 30JUN77    0 *               OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  0

IBM 60/20      1    0    0    0  >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301  0   DSK  1     0      0
     ***********************     >352   0  ADM    0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251  0   OTH  0
     * INSTALLED:          *     >176   0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151  0
     *  PRICR 30JUN77    1 *     >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
     *  AFTER 30JUN77    0 *               OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  1

IML CGRAPH     0    0    0    2  >528   0  RES    0   0   0   2   0   0   0   0   0   0   0  >12  0  >301  0   DSK  2     0      2
     ***********************     >352   0  ADM    0   0   0   2   0   0   0   0   0   0   0  > 9  0  >251  0   OTH  0
     * INSTALLED:          *     >176   2  INS    0   0   0   0   2   0   0   0   0   0   0  > 6  0  >151  0
     *  PRICR 30JUN77    2 *     >  0   0  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
     *  AFTER 30JUN77    0 *               OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  2  >  0  2

INS 8080       0    1    0    0  >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301  0   DSK  0     1      0
     ***********************     >352   0  ADM    1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251  0   OTH  0
     * INSTALLED:          *     >176   0  INS    1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151  0
     *  PRICR 30JUN77    1 *     >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
     *  AFTER 30JUN77    0 *               OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  1

INS 8080       0    0    1    1  >528   1  RES    2   0   0   0   0   0   0   0   0   0   0  >12  0  >301  0   DSK  0     0      1
     ***********************     >352   0  ADM    2   0   0   0   0   0   0   0   0   0   0  > 9  0  >251  0   OTH  0
     * INSTALLED:          *     >176   0  INS    0   0   0   0   0   0   0   0   0   0   2  > 6  0  >151  0
     *  PRIOR 30JUN77    2 *     >  0   0  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
     *  AFTER 30JUN77    0 *               OTH    2   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  2

INT            0    0    2    0  >528   1  RES    2   0   0   0   0   0   0   0   0   0   1  >12  0  >301  0   DSK  1     0      1
     ***********************     >352   0  ADM    3   0   0   0   0   0   0   0   0   0   0  > 9  0  >251  0   OTH  0
     * INSTALLED:          *     >176   0  INS    1   0   0   0   0   0   0   0   0   0   2  > 6  0  >151  0
     *  PRIOR 30JUN77    3 *     >  0   2  H.ED   3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
     *  AFTER 30JUN77    0 *               OTH    3   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  3

INT 32         0    0    1    0  >528   0  RES    0   0   0   0   0   0   1   0   0   0   0  >12  0  >301  0   DSK  1     0      1
     ***********************     >352   0  ADM    0   0   1   0   0   0   0   0   0   0   0  > 9  0  >251  0   OTH  0
     * INSTALLED:          *     >176   0  INS    0   0   1   0   0   0   0   0   0   0   0  > 6  0  >151  0
     *  PRIOR 30JUN77    1 *     >  0   1  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  1
     *  AFTER 30JUN77    0 *               OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0  0

INT 6/16       0    0    2    0  >528   0  RES    1   0   0   0   0   1   0   0   0   0   1  >12  0  >301  0   DSK  0     0      2
     ***********************     >352   0  ADM    3   0   0   0   0   0   0   0   0   0   0  > 9  0  >251  0   OTH  0
     * INSTALLED:          *     >176   3  INS    1   0   0   0   0   1   0   0   0   0   1  > 6  0  >151  0
     *  PRIOR 30JUN77    2 *     >  0   0  H.ED   3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  1
     *  AFTER 30JUN77    1 *               OTH    3   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  2

INT 7/14       0    0    1    0  >528   0  RES    1   0   0   0   0   0   0   0   0   0   0  >12  0  >301  0   DSK  0     0      0
     ***********************     >352   1  ADM    0   0   0   1   0   0   0   0   0   0   0  > 9  0  >251  0   OTH  0
     * INSTALLED:          *     >176   0  INS    0   0   0   0   0   0   0   1   0   0   0  > 6  0  >151  0
     *  PRIOR 30JUN77    1 *     >  0   0  H.ED   1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  1
     *  AFTER 30JUN77    0 *               OTH    1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0  0

INT 7/16       0    0    7    2  >528   3  RES    4   0   0   0   0   1   0   0   1   1   3  >12  0  >301  0   DSK  7     1      8
     ***********************     >352   0  ADM    9   1   0   0   0   0   0   0   0   0   0  > 9  0  >251  0   OTH  0
     * INSTALLED:          *     >176   4  INS    5   0   1   0   0   1   0   0   0   0   3  > 6  0  >151  0
     *  PRIOR 30JUN77   10 *     >  0   2  H.ED  10   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  6
     *  AFTER 30JUN77    0 *               OTH   10   0   0   0   0   0   0   0   0   0   0  > 0  3  >  0  3

INT 7/32       0    0    8    3  >528   3  RES    4   0   3   0   0   0   0   0   1   0   1  >12  0  >301  7   DSK  7     0      9
     ***********************     >352   0  ADM    6   0   0   3   0   0   0   0   0   0   0  > 9  0  >251  1   OTH  0
     * INSTALLED:          *     >176   2  INS    4   0   0   1   0   3   0   0   0   0   1  > 6  0  >151  0
     *  PRIOR 30JUN77    9 *     >  0   1  H.ED   9   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
     *  AFTER 30JUN77    0 *               OTH    6   3   0   0   0   0   0   0   0   0   0  > 0  5  >  0  1

INT 70         0    0    3    0  >528   0  RES    0   0   0   0   0   3   0   0   0   0   0  >12  0  >301  0   DSK  3     3      3
     ***********************     >352   0  ADM    3   0   0   0   0   0   0   0   0   0   0  > 9  0  >251  0   OTH  0
     * INSTALLED:          *     >176   3  INS    0   0   0   0   0   3   0   0   0   0   0  > 6  0  >151  3
     *  PRICR 30JUN77    3 *     >  0   0  H.ED   3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
     *  AFTER 30JUN77    0 *               OTH    3   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  0

INT 74         0    0    0    1  >528   1  RES    1   0   1   0   0   0   0   0   0   0   0  >12  0  >301  0   DSK  0     1      0
     ***********************     >352   0  ADM    1   0   0   0   1   0   0   0   0   0   0  > 9  0  >251  0   OTH  0
     * INSTALLED:          *     >176   0  INS    1   0   0   0   1   0   0   0   0   0   0  > 6  0  >151  0
     *  PRICR 30JUN77    2 *     >  0   0  H.ED   2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
     *  AFTER 30JUN77    0 *               OTH    1   1   0   0   0   0   0   0   0   0   0  > 0  0  >  0  1

INT 8/32       0    1    3    1  >528   3  RES    1   0   1   0   0   0   0   0   1   0   2  >12  0  >301  3   DSK  4     1      4
     ***********************     >352   0  ADM    4   0   0   0   0   1   0   0   0   0   0  > 9  0  >251  1   OTH  0
     * INSTALLED:          *     >176   0  INS    3   0   1   0   0   1   0   0   0   0   0  > 6  0  >151  0
     *  PRIOR 30JUN77    5 *     >  0   1  H.ED   5   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51  0
     *  AFTER 30JUN77    0 *               OTH    4   0   0   0   0   0   0   0   1   0   0  > 0  4  >  0  0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                          SUMMARY OF COMPUTERS
       GROUP (                                    )

     MODEL     NUMBER    NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER   CORE CAP  ADDL      COMM PORTS
MFG  NO.       LEASED   PURCHASED   AVG    ****                 PERCENT                *  TAPE     THOUSAND  STORAGE   ***********
              MFG H-CC MFG OTHR HRS   NO   TYPE N/O 10  20  30  40  50  60  70  80 90 100 DRIVES   OF CHARS  TYPE NO  BTCH INTRACT

INT 80         0    0   1   0  >528   1   RES   0   0   0   0   0   0   0   0   0  0   1  >12  0  >301   0  DSK  0     0      0
     ***********************   >352   0   ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:            *  >176  0   INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77     1 *  >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77     0 *             OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   1

INT 85         0    0   2   0  >528   0   RES   0   0   0   0   0   0   0   0   0  2   0  >12  0  >301   0  DSK  1     0      0
     ***********************   >352   0   ADM   2   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:            *  >176  0   INS   0   2   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77     2 *  >  0   2   H.ED  2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   1
     *  AFTER 30JUN77     0 *             OTH   2   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   1

ITL AS/4       0    0   2   0  >528   0   RES   2   0   0   0   0   0   0   0   0  0   0  >12  0  >301   1  DSK  1     1      0
     ***********************   >352   0   ADM   1   0   0   0   0   0   0   0   1  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:            *  >176  1   INS   0   1   0   0   0   0   0   0   0  0   1  > 6  1  >151   0
     *  PRIOR 30JUN77     1 *  >  0   0   H.ED  2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77     1 *             OTH   2   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   1

ITL AS/5       0    0   1   0  >528   1   RES   0   0   0   0   0   0   0   0   1  0   0  >12  0  >301   1  DSK  1     1      1
     ***********************   >352   0   ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:            *  >176  0   INS   0   1   0   0   0   0   0   0   0  0   0  > 6  1  >151   0
     *  PRIOR 30JUN77     1 *  >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77     0 *             OTH   0   1   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

KER IDS16      0    0   0   1  >528   0   RES   1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  1     0      1
     ***********************   >352   0   ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:            *  >176  1   INS   0   0   0   0   0   0   0   0   0  0   1  > 6  0  >151   0
     *  PRIOR 30JUN77     1 *  >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   1
     *  AFTER 30JUN77     0 *             OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

MCM 70         0    0   1   0  >528   0   RES   0   1   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  0     0      0
     ***********************   >352   1   ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:            *  >176  0   INS   0   0   0   0   0   0   0   0   0  1   0  > 6  0  >151   0
     *  PRIOR 30JUN77     1 *  >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77*    0 *             OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

MDS 2300       1    0   0   0  >528   0   RES   0   1   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  1     0      0
     ***********************   >352   0   ADM   0   0   0   0   0   0   1   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:            *  >176  0   INS   0   0   0   0   1   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77     1 *  >  0   1   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77     0 *             OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   1

MIC 1600       0    0   7   0  >528   6   RES   7   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  5     0      7
     ***********************   >352   1   ADM   3   0   0   0   0   0   0   0   0  0   4  > 9  0  >251   0  OTH  0
     * INSTALLED:            *  >176  0   INS   6   0   0   0   0   0   0   0   0  0   1  > 6  0  >151   0
     *  PRIOR 30JUN77     7 *  >  0   0   H.ED  7   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   3
     *  AFTER 30JUN77     0 *             OTH   7   0   0   0   0   0   0   0   0  0   0  > 0  4  >  0   4

MID 1621       0    0   1   0  >528   1   RES   0   1   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  1     0      0
     ***********************   >352   0   ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:            *  >176  0   INS   0   0   0   0   0   0   0   0   0  1   0  > 6  0  >151   0
     *  PRIOR 30JUN77     1 *  >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77     0 *             OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   1

MIL MILAC      0    0   0   0  >528   0   RES   1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  1     0      0
     ***********************   >352   0   ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:            *  >176  0   INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77     1 *  >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   1
     *  AFTER 30JUN77     0 *             OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

MCD COMP II    0    0   1   0  >528   0   RES   0   0   0   0   0   0   0   0   0  0   1  >12  0  >301   0  DSK  1     0      1
     ***********************   >352   0   ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:            *  >176  0   INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77     1 *  >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   1
     *  AFTER 30JUN77     0 *             OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   0

MOD COMPII     1    0   1   0  >528   1   RES   2   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  0     0      1
     ***********************   >352   0   ADM   2   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:            *  >176  0   INS   2   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77     2 *  >  0   0   H.ED  2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77     0 *             OTH   2   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

MOD COMPIV     0    0   3   0  >528   0   RES   3   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  0     0      0
     ***********************   >352   0   ADM   3   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:            *  >176  0   INS   3   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77     3 *  >  0   0   H.ED  3   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77     0 *             OTH   3   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

MON 11         0    0   0   1  >528   0   RES   0   0   0   0   0   0   0   0   0  0   1  >12  0  >301   0  DSK  0     0      1
     ***********************   >352   0   ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:            *  >176  0   INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *  PRIOR 30JUN77     1 *  >  0   1   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *  AFTER 30JUN77     0 *             OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   1
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                                              SUMMARY OF COMPUTERS
     GROUP (                                         )

      MODEL    NUMBER     NUMBER    AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER    CORE CAP  ADDL           COMM PORTS
MFG    NO.     LEASED   PURCHASED     AVG     ****                 PERCENT                  *  TAPE      THOUSAND  STORAGE        ***********
            MFG H-CO   MFG OTHR  HRS    NO  TYPE N/O  10  20  30  40  50  60  70  80  90 100  DRIVES    OF CHARS  TYPE NO      BTCH INTRACT

MON 1860       0    0    0    0 >528    0  RES     1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0       0
    *************************** >352    0  ADM     1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:             *  >176    0  INS     1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77       1 *  >  0    0  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77       0 *             OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

MOS K1M1       0    0   12    0 >528   12  RES     0   0   0   0   0   0   0   0   0   0  12  >12  0  >301   0  DSK   0     0      12
    *************************** >352    0  ADM    12   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:             *  >176    0  INS    12   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77      12 *  >  0    0  H.ED   12   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77       0 *             OTH    12   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0  12

MOT KIM-3      0    0    3    0 >528    0  RES     3   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     3       0
    *************************** >352    0  ADM     3   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:             *  >176    3  INS     0   0   0   0   0   0   0   0   0   0   3  > 6  0  >151   0
    *  PRIOR 30JUN77       3 *  >  0    0  H.ED    3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77       0 *             OTH     3   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   3

MOT 6800       0    0    0    9 >528    0  RES     0   8   0   0   0   2   0   0   0   0   0  >12  0  >301   0  DSK   0     0       9
    *************************** >352    0  ADM    10   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:             *  >176   10  INS     0   0   0   0   0   2   0   0   0   0   8  > 6  0  >151   0
    *  PRIOR 30JUN77      10 *  >  0    0  H.ED   10   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77       0 *             OTH    10   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0  10

NCR            0    0    1    0 >528    0  RES     1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0       0
    *************************** >352    0  ADM     1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:             *  >176    0  INS     1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77       1 *  >  0    0  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77       0 *             OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

NCR CENTURY    1    0    0    0 >528    0  RES     0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   1     1       1
    *************************** >352    0  ADM     0   0   0   0   1   0   0   0   0   0   0  > 9  0  >251   0  OTH   0
    * INSTALLED:             *  >176    1  INS     0   0   0   0   0   1   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77       1 *  >  0    0  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77       0 *             OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

NCR 100        2    0    9    0 >528    1  RES    11   3   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  11     4       1
    *************************** >352    0  ADM     2   0   1   1   1   5   1   0   2   0   1  > 9  0  >251   0  OTH   0
    * INSTALLED:             *  >176    8  INS     2   2   0   1   3   4   0   0   1   1   0  > 6  0  >151   0
    *  PRIOR 30JUN77      14 *  >  0    2  H.ED   14   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   1
    *  AFTER 30JUN77       0 *             OTH    13   1   0   0   0   0   0   0   0   0   0  > 0  3  >  0  11

NCR 101        8    1   38    0 >528   34  RES    42   4   1   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  47    39       1
    *************************** >352    3  ADM    31   0   1   1   1   3   2   0   2   4   2  > 9  0  >251   0  OTH   0
    * INSTALLED:             *  >176    6  INS     2   5   3   1   0   3   2   0   0   0  31  > 6  0  >151   1
    *  PRIOR 30JUN77      47 *  >  0    4  H.ED   46   1   0   0   0   0   0   0   0   0   0  > 3  0  > 51   2
    *  AFTER 30JUN77       0 *             OTH    45   1   0   0   0   0   1   0   0   0   0  > 0  3  >  0  44

NCR 151        3    1    1    1 >528    0  RES     2   2   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   4     2       2
    *************************** >352    0  ADM     0   0   0   0   1   0   0   1   1   0   1  > 9  0  >251   1  OTH   0
    * INSTALLED:             *  >176    2  INS     1   0   1   1   0   1   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77       4 *  >  0    2  H.ED    4   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
    *  AFTER 30JUN77       0 *             OTH     3   1   0   0   0   0   0   0   0   0   0  > 0  3  >  0   2

NCR 200        5    0    5    0 >528    0  RES     6   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   6     0       0
    *************************** >352    3  ADM     0   0   0   0   2   0   0   3   0   0   1  > 9  0  >251   0  OTH   0
    * INSTALLED:             *  >176    3  INS     0   1   4   0   0   0   1   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77       6 *  >  0    0  H.ED    2   4   0   0   0   0   0   0   0   0   0  > 3  0  > 51   6
    *  AFTER 30JUN77       0 *             OTH     5   0   0   1   0   0   0   0   0   0   0  > 0  5  >  0   0

NCR 201        1    1    0    0 >528    1  RES     1   0   1   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   2     1       1
    *************************** >352    0  ADM     0   0   0   0   0   0   0   1   0   0   1  > 9  0  >251   1  OTH   0
    * INSTALLED:             *  >176    1  INS     2   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77       2 *  >  0    0  H.ED    2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
    *  AFTER 30JUN77       0 *             OTH     1   0   1   0   0   0   0   0   0   0   0  > 0  2  >  0   0

NCR 260        2    0    0    0 >528    2  RES     2   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0       0
    *************************** >352    0  ADM     2   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  CTH   0
    * INSTALLED:             *  >176    0  INS     0   0   0   0   0   0   0   0   0   0   2  > 6  0  >151   0
    *  PRIOR 30JUN77       2 *  >  0    0  H.ED    2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77       0 *             OTH     2   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

NCR 399        1    1    4    0 >528    0  RES     6   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     1       0
    *************************** >352    0  ADM     0   0   0   0   0   0   0   0   0   0   6  > 9  0  >251   0  OTH   1
    * INSTALLED:             *  >176    1  INS     6   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77       6 *  >  0    4  H.ED    6   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77       0 *             OTH     6   0   0   0   0   0   0   0   0   0   0  > 0  2  >  0   5

NCR 499        1    0    0    0 >528    0  RES     1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK   0     0       0
    *************************** >352    0  ADM     0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251   0  OTH   0
    * INSTALLED:             *  >176    0  INS     1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
    *  PRIOR 30JUN77       1 *  >  0    0  H.ED    1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
    *  AFTER 30JUN77      -0 *             OTH     1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0
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INVENTORY OF COMPUTERS, APPLICATICNS CF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                         UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                    PAGE VII-31

                                                      SUMMARY CF COMPUTERS
      GROUP (                                 I

      MODEL    NUMBER    NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************ NUMBER  CORE CAP  ADDL      COMM PORTS
 MFG  NO.      LEASED  PURCHASED   AVG     ****                 PERCENT                 *  TAPE    THOUSANC  STORAGE   ***********
              MFG H-CC MFG OTHR HRS    NO  TYPE N/O 10  20  30  40  50  60  70  80 90 100  DRIVES  OF CHARS  TYPE NO   BTCH INTRACT

 NCR 50        1    0    1    0  >528   0  RES  2   0   0   0   0   0   0   0   0  0   0  >12  0  >301  0  DSK  2      0       0
      ***********************    >352   0  ADM  0   0   0   0   0   1   0   0   0  1   0  > 9  0  >251  0  OTH  0
      * INSTALLED:           *   >176   0  INS  0   1   0   0   0   1   0   0   0  0   0  > 6  0  >151  0
      *  PRIOR 30JUN77    2  *   >  0   2  H.ED 2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51  0
      *  AFTER 30JUN77    0  *             OTH  2   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0  2

 NCR 500       0    0    1    0  >528   0  RES  1   0   0   0   0   0   0   0   0  0   0  >12  0  >301  0  DSK  0      0       0
      ***********************    >352   0  ADM  1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251  0  OTH  0
      * INSTALLED:           *   >176   0  INS  1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151  0
      *  PRIOR 30JUN77    1  *   >  0   0  H.ED 1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51  0
      *  AFTER 30JUN77    0  *             OTH  1   0       0   0   0   0   0   0  0   0  > 0  0  >  0  0

 NCR 615       2    0    0    0  >528   1  RES  2   0   0   0   0   0   0   0   0  0   0  >12  0  >301  0  DSK  2      1.      1
      ***********************    >352   0  ADM  0   0   0   1   0   0   0   0   1  0   0  > 9  0  >251  0  OTH  0
      * INSTALLED:           *   >176   0  INS  0   1   0   1   0   0   0   0   0  0   0  > 6  0  >151  0
      *  PRIOR 30JUN77    2  *   >  0   1  H.ED 2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51  2
      *  AFTER 30JUN77    0  *             OTH  1   0   0   1   0   0   0   0   0  0   0  > 0  1  >  0  0

 NCR 8200      0    0    1    0  >528   0  RES  1   0   0   0   0   0   0   0   0  0   0  >12  0  >301  C  DSK  1      0       1
      ***********************    >352   0  ADM  0   0   0   0   0   0   0   0   0  0   1  > 9  0  >251  0  OTH  0
      * INSTALLED:           *   >176   0  INS  1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151  0
      *  PRIOR 30JUN77    1  *   >  0   1  H.ED 1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51  1
      *  AFTER 30JUN77    0  *             OTH  1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0  0

 NCR 8250      0    0    0    1  >528   0  RES  0   0   0   0   0   0   0   0   0  0   1  >12  0  >301  0  DSK  1      0       1
      ***********************    >352   0  ADM  1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251  0  OTH  0
      * INSTALLEC:           *   >176   0  INS  1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151  0
      *  PRICR 30JUN77    1  *   >  0   1  H.ED 1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51  1
      *  AFTER 30JUN77    0  *             OTH  1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0  0

 NCR 8450      0    1    0    0  >528   0  RES  1   0   0   0   0   C   0   0   0  0   0  >12  0  >301  0  DSK  1      0       1
      ***********************    >352   0  ADM  1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251  0  OTH  0
      * INSTALLED:           *   >176   0  INS  1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151  0
      *  PRICR 30JUN77    0  *   >  0   0  H.ED 1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51  1
      *  AFTER 30JUN77    1  *             OTH  1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0  0

 ND  4420      0    1    0    0  >528   1  RES  0   0   0   0   1   0   0   0   0  0   0  >12  0  >301  0  DSK  1      1       1
      ***********************    >352   0  ADM  1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251  0  OTH  0
      * INSTALLED:           *   >176   0  INS  0   0   1   0   0   C   0   0   0  0   0  > 6  0  >151  0
      *  PRICR 30JUN77    1  *   >  0   0  H.ED 0   0   1   0   0   0   0   0   0  0   0  > 3  0  > 51  0
      *  AFTER 30JUN77    0  *             OTH  0   0   1   0   0   0   0   0   0  0   0  > 0  1  >  0  1

 ND  812       0    0    2    0  >528   0  RES  0   0   0   0   0   1   0   0   0  0   1  >12  0  >301  0  DSK  0      0       1
      ***********************    >352   0  ADM  2   0   0   0   0   0   0   0   0  0   0  > 9  0  >251  0  OTH  0
      * INSTALLED:           *   >176   1  INS  1   0   0   0   0   1   0   0   0  0   0  > 6  0  >151  0
      *  PRIOR 30JUN77    2  *   >  0   1  H.ED 2   0   0   0   0   C   0   0   0  0   0  > 3  0  > 51  0
      *  AFTER 30JUN77    0  *             OTH  2   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0  2

 NIC NMR       0    0    0    1  >528   1  RES  0   0   0   0   0   0   0   0   0  0   1  >12  0  >301  0  DSK  0      0       1
      ***********************    >352   0  ADM  1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251  0  OTH  0
      * INSTALLED:           *   >176   0  INS  1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151  0
      *  PRICR 30JUN77    1  *   >  0   0  H.ED 1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51  0
      *  AFTER 30JUN77    0  *             OTH  1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0  1

 NIC 1080      0    0    0    0  >528   0  RES  4   0   0   0   0   0   0   0   0  0   0  >12  0  >301  0  DSK  0      0       0
      ***********************    >352   0  ADM  4   0   0   0   0   0   0   0   0  0   0  > 9  0  >251  0  OTH  0
      * INSTALLED:           *   >176   0  INS  4   0   0   0   0   0   0   0   0  0   0  > 6  0  >151  0
      *  PRIOR 30JUN77    4  *   >  0   0  H.ED 4   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51  0
      *  AFTER 30JUN77    0  *             OTH  4   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0  0

 NIC 1190      0    0    0    0  >528   0  RES  2   0   0   0   0   0   0   0   0  0   0  >12  0  >301  0  DSK  0      0       0
      ***********************    >352   0  ADM  2   0   0   0   0   0   0   0   0  0   0  > 9  0  >251  0  OTH  0
      * INSTALLED:           *   >176   0  INS  2   0   0   0   0   0   0   0   0  0   0  > 6  0  >151  0
      *  PRIOR 30JUN77    2  *   >  0   0  H.ED 2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51  0
      *  AFTER 30JUN77    0  *             OTH  2   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0  0

 OLI A7        0    0    2    0  >528   0  RES  3   0   0   0   0   0   0   0   0  0   0  >12  0  >301  0  DSK  0      0       1
      ***********************    >352   0  ADM  0   0   0   0   0   0   0   0   0  0   3  > 9  0  >251  0  CTH  1
      * INSTALLED:           *   >176   0  INS  3   0   0   0   0   0   0   0   0  0   0  > 6  0  >151  0
      *  PRIOR 30JUN77    3  *   >  0   2  H.ED 3   0   0   0   0   C   0   0   0  0   0  > 3  0  > 51  0
      *  AFTER 30JUN77    0  *             OTH  3   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0  1

 OLI P602      0    0    1    0  >528   0  RES  1   0   0   0   0   0   0   0   0  0   0  >12  0  >301  0  DSK  0      0       0
      ***********************    >352   0  ADM  1   0   0   0   0   C   0   0   0  0   0  > 9  0  >251  0  CTH  0
      * INSTALLED:           *   >176   0  INS  0   0   0   0   0   0   0   0   0  0   1  > 6  0  >151  0
      *  PRIOR 30JUN77    1  *   >  0   1  H.ED 1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51  0
      *  AFTER 30JUN77    0  *             OTH  1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0  0

 ONT           0    0    1    0  >528   0  RES  0   0   0   0   1   0   0   0   0  0   0  >12  0  >301  0  DSK  1      1       1
      ***********************    >352   0  ADM  0   0   0   0   0   0   1   0   0  0   0  > 9  0  >251  0  OTH  0
      * INSTALLED:           *   >176   0  INS  1   0   0   0   0   C   0   0   0  0   0  > 6  0  >151  1
      *  PRIOR 30JUN77    1  *   >  0   1  H.ED 1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51  0
      *  AFTER 30JUN77    0  *             OTH  1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0  0
 INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
               CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA                      PAGE VII-32
                             UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                SUMMARY OF COMPUTERS
     GROUP (                                )

     MODEL    NUMBER    NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************ NUMBER   CORE CAP  ADDL      COMM PORTS
 MFG  NO.     LEASED  PURCHASEC   AVG      ****                  PERCENT                * TAPE     THOUSAND  STORAGE   ***********
            MFG H-CO MFG CTHR HRS     NO   TYPE N/O 10  20  30  40  50  60  70  80 90 100 DRIVES   OF CHARS  TYPE NC   BTCH INTRACT

 ONT OPI-32   0    0    2    0  >528   2   RES   0   2   0   0   0   0   0   0   0  0   0  >12  0  >301   0  CSK  2     0      2
     *********************** >352   0   ADM   0   0   0   0   0   0   0   2   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          * >176   0   INS   0   0   0   2   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   2 * >  0   0   H.ED  2.  0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *            OTH   2   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   2

 OTH          0    0    1    0  >528   0   RES   1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  1     0      1
     *********************** >352   0   ADM   0   0   0   0   0   0   0   0   0  1   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          * >176   0   INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   1 * >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *            OTH   0   1   0   0   0   0   0   0   0  0   0  > 0  1  >  0   1

 OTH CALDATA  0    0    1    0  >528   1   RES   0   0   0   1   0   0   0   0   0  0   0  >12  0  >301   0  DSK  1     1      1
     *********************** >352   0   ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          * >176   0   INS   0   0   0   0   0   0   0   1   0  0   0  > 6  0  >151   1
     *   PRIOR 30JUN77   1 * >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

 OTH IV70     0    0    1    0  >528   1   RES   1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  1     0      1
     *********************** >352   0   ADM   0   0   0   0   0   0   0   0   0  1   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          * >176   0   INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   1 * >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   1
     *   AFTER 30JUN77   0 *            OTH   0   1   0   0   0   0   0   0   0  0   0  > 0  1  >  0   0

 OTH 2100     0    0    0    1  >528   0   RES   0   0   0   0   0   1   0   0   0  0   0  >12  0  >301   0  DSK  0     0      0
     *********************** >352   0   ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          * >176   1   INS   0   0   0   0   0   1   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   1 * >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   1

 OTH 2400     1    0    0    0  >528   0   RES   1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  0     1      0
     *********************** >352   0   ADM   0   0   0   0   0   0   0   0   0  0   1  > 9  0  >251   0  OTH  0
     * INSTALLED:          * >176   0   INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   1 * >  0   1   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   1

 OTH 80       0    0    1    0  >528   0   RES   1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  0     0      0
     *********************** >352   0   ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          * >176   0   INS   0   0   0   0   0   0   0   0   0  0   1  > 6  0  >151   0
     *   PRIOR 30JUN77   1 * >  0   1   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   1

 OTH 816      0    0    1    0  >528   0   RES   1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  0     1      1
     *********************** >352   1   ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          * >176   0   INS   0   0   0   0   0   0   0   0   0  0   1  > 6  0  >151   0
     *   PRIOR 30JUN77   1 * >  0   0   H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   1

 OTH 8510     0    0    2    0  >528   0   RES   0   0   0   2   0   0   0   0   0  0   0  >12  0  >301   0  DSK  2     0      0
     *********************** >352   0   ADM   0   0   0   0   0   0   0   2   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          * >176   0   INS   2   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   2 * >  0   2   H.ED  2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *            OTH   2   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   2

 POL 88       0    0    0    0  >528   0   RES   1   0   0   0   0   1   0   0   0  0   0  >12  0  >301   0  DSK  1     0      1
     *********************** >352   0   ADM   2   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          * >176   1   INS   1   0   0   0   0   1   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   2 * >  0   0   H.ED  2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *            OTH   2   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   1

 PRI 200      0    0    0    0  >528   0   RES   0   0   0   0   0   0   0   0   0  0   2  >12  0  >301   0  DSK  0     0      0
     *********************** >352   0   ADM   2   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          * >176   0   INS   2   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   2 * >  0   0   H.ED  2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *            OTH   2   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

 PRI 300      1    0    9    3  >528   6   RES   5   1   1   0   0   1   0   0   0  0   9  >12  0  >301   0  DSK  9     4      7
     *********************** >352   1   ADM  14   3   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          * >176   3   INS  11   0   0   0   0   1   0   0   1  1   3  > 6  0  >151   0
     *   PRIOR 30JUN77  16 * >  0   1   H.ED 17   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   7
     *   AFTER 30JUN77   1 *            OTH  17   0   0   0   0   0   0   0   0  0   0  > 0  2  >  0   2

 PRI 400      1    0    4    0  >528   3   RES   1   0   1   0   0   3   0   0   0  0   1  >12  0  >301   2  DSK  5     1      5
     *********************** >352   1   ADM   4   0   0   1   0   1   0   0   0  0   0  > 9  0  >251   1  OTH  0
     * INSTALLED:          * >176   0   INS   3   0   0   1   0   1   0   0   1  0   0  > 6  0  >151   2
     *   PRIOR 30JUN77   6 * >  0   0   H.ED  6   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *            OTH   6   0   0   0   0   0   0   0   0  0   0  > 0  5  >  0   0

 PRI 500      0    0    2    0  >528   2   RES   0   0   0   2   0   0   0   0   0  0   0  >12  0  >301   2  DSK  2     0      2
     *********************** >352   0   ADM   2   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          * >176   0   INS   0   0   0   0   0   0   2   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   0 * >  0   0   H.ED  2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   2 *            OTH   2   0   0   0   0   0   0   0   0  0   0  > 0  2  >  0   0
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                                          SUMMARY OF COMPUTERS

   GROUP I                                   )

   MODEL     NUMBER    NUMBER   AVGLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER   CORE CAP    ADDL      COMM PORTS
MFG  NO.     LEASED  PURCHASED    AVG    ****                PERCENT                  *  TAPE     THOUSAND   STORAGE   ***********
            MFG H-CO MFG CTHR HRS     NO  TYPE  N/O 10  20  30  40  50  60  70  80  90 100 DRIVES   OF CHARS   TYPE NO   BTCH INTRACT

PRO TECH      0   0   1   0  >528   1  RES   0   0   0   0   0   0   0   0   0   0   1  >12  0  >301   0  DSK  0    0      0
     ***********************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS   1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

PRT SOL/703   0   0   3   3  >528   0  RES   3   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  3    0      3
     ***********************  >352   0  ADM   0   0   0   0   0   0   0   0   0   0   3  > 9  0  >251   0  OTH  3
     * INSTALLED:         *  >176   3  INS   0   3   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   3 *  >  0   0  H.ED  3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   0 *            OTH   3   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   3

RAY 704       0   0   0   0  >528   0  RES   0   0   0   0   0   0   0   0   0   0   5  >12  0  >301   0  DSK  0    0      0
     ***********************  >352   0  ADM   5   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS   5   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   5 *  >  0   0  H.ED  5   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   0 *            OTH   5   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

SAN 2115A     0   0   1   0  >528   0  RES   0   0   0   0   0   1   0   0   0   0   0  >12  0  >301   0  DSK  0    1      1
     ***********************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS   0   0   0   0   0   1   0   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   1 *  >  0   1  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

SCC DCT-132   0   0   1   0  >528   0  RES   0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0    0      0
     ***********************  >352   0  ADM   0   0   0   0   0   0   1   0   0   0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS   0   0   0   1   0   0   0   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   1 *  >  0   1  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

SCC 1250      1   0   1   0  >528   0  RES   1   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  1    0      0
     ***********************  >352   1  ADM   0   0   0   0   0   0   0   0   0   0   1  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS   0   1   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   1
     *  AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

SEL 32/55     0   0   2   0  >528   1  RES   0   0   0   0   0   0   0   0   0   0   2  >12  0  >301   1  DSK  2    2      2
     ***********************  >352   0  ADM   2   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS   2   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   2 *  >  0   1  H.ED  2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   0 *            OTH   2   0   0   0   0   0   0   0   0   0   0  > 0  2  >  0   1

SEL 8108      0   0   1   0  >528   1  RES   1   0   0   0   0   0   0   0   0   0   1  >12  0  >301   0  DSK  1    1      1
     ***********************  >352   0  ADM   2   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS   2   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   2 *  >  0   0  H.ED  2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
     *  AFTER 30JUN77   0 *            OTH   2   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

SIC AC        0   0   0   0  >528   0  RES   0   0   0   0   0   1   0   0   0   0   0  >12  0  >301   0  DSK  0    0      1
     ***********************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS   0   0   0   0   0   1   0   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   1 *  >  0   1  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

SIN SYS10     1   0   0   0  >528   1  RES   0   0   0   0   0   0   0   0   0   0   1  >12  0  >301   0  DSK  1    0      0
     ***********************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS   1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   1

SWT 6800      0   0   1   0  >528   0  RES   1   0   1   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0    0      0
     ***********************  >352   0  ADM   1   0   1   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS   1   0   0   0   0   0   1   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   2 *  >  0   1  H.ED  2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   0 *            OTH   2   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

TDL Z/80      0   0   3   0  >528   0  RES   3   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  3    0      0
     ***********************  >352   0  ADM   3   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS   0   0   0   0   0   0   0   0   0   0   3  > 6  0  >151   0
     *  PRIOR 30JUN77   3 *  >  0   3  H.ED  3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   0 *            OTH   3   0   0   0   0   0   0   0   0   0   0  > 0  3  >  0   3

TEK 40101     0   0   2   0  >528   0  RES   0   0   0   0   0   0   0   0   0   0   2  >12  0  >301   0  DSK  0    0      0
     ***********************  >352   0  ADM   2   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:         *  >176   0  INS   2   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
     *  PRIOR 30JUN77   2 *  >  0   2  H.ED  2   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   0 *            OTH   2   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

TEK 4051      1   0   3   0  >528   0  RES   5   3   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0    0      4
     ***********************  >352   0  ADM   7   0   0   0   0   1   0   0   0   0   0  > 9  0  >251   0  OTH  1
     * INSTALLED:         *  >176   5  INS   1   0   0   0   0   4   0   0   0   0   3  > 6  0  >151   0
     *  PRIOR 30JUN77   7 *  >  0   2  H.ED  5   0   0   0   0   3   0   0   0   0   0  > 3  0  > 51   0
     *  AFTER 30JUN77   1 *            OTH   8   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   7
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                                              SUMMARY OF COMPUTERS
    GROUP (                              )

    MODEL    NUMBER    NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************ NUMBER   CORE CAP   ADDL      COMM PORTS
MFG  NO.     LEASED   PURCHASED   AVG     ****                 PERCENT                *   TAPE    THOUSAND   STORAGE   ***********
            MFG H-CO MFG OTHR HRS    NO  TYPE N/O 10  20  30  40  50  60  70  80 90 100  DRIVES   OF CHARS   TYPE NO   BTCH INTRACT

TEM TEMPOI   1   0   0   0  >528   0  RES   0   0   1   0   0   0   0   0   0  0   0   >12  0   >301   0  DSK   0     1      1
    **********************  >352   0  ADM   0   1   0   0   0   0   0   0   0  0   0   > 9  0   >251   0  OTH   0
    * INSTALLED:         *  >176   1  INS   0   0   0   0   0   0   0   1   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   1

TEM TEMPOII  0   0   1   0  >528   1  RES   0   0   0   0   0   0   0   0   0  0   1   >12  0   >301   0  DSK   0     0      1
    **********************  >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0  OTH   0
    * INSTALLED:         *  >176   0  INS   1   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   1

TXI 745      1   0   0   0  >528   1  RES   1   0   0   0   0   0   0   0   0  0   0   >12  0   >301   0  DSK   0     0      0
    **********************  >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0  OTH   0
    * INSTALLED:         *  >176   0  INS   0   0   0   0   0   0   0   0   0  0   1   > 6  0   >151   0
    *  PRIOR 30JUN77   0 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77   1 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   0

TXI 960A     0   0   2   0  >528   0  RES   0   0   0   0   1   0   0   0   1  0   0   >12  0   >301   0  DSK   1     1      1
    **********************  >352   0  ADM   2   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0  OTH   0
    * INSTALLED:         *  >176   1  INS   0   0   1   0   0   0   1   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77   2 *  >  0   1  H.ED  2   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   1
    *  AFTER 30JUN77   0 *            OTH   2   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   0

TXI 960B     0   0   2   0  >528   0  RES   0   0   0   0   0   0   0   0   2  0   0   >12  0   >301   0  DSK   0     0      2
    **********************  >352   0  ADM   2   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0  OTH   0
    * INSTALLED:         *  >176   2  INS   0   0   2   0   0   0   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77   2 *  >  0   0  H.ED  2   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77   0 *            OTH   2   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   2

TXI 9600     0   0   0   0  >528   0  RES   1   0   0   0   0   0   0   0   0  0   0   >12  0   >301   0  DSK   0     0      0
    **********************  >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0  OTH   0
    * INSTALLED:         *  >176   0  INS   1   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   0

TXI 980      0   0   0   1  >528   0  RES   6   0   0   0   0   0   0   0   0  0   0   >12  0   >301   0  DSK   0     1      0
    **********************  >352   0  ADM   6   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0  OTH   0
    * INSTALLED:         *  >176   0  INS   6   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77   6 *  >  0   1  H.ED  5   0   0   0   0   0   0   0   0  0   1   > 3  0   > 51   0
    *  AFTER 30JUN77   0 *            OTH   6   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   1

TXI 980A     0   0   0   0  >528   1  RES   0   0   0   1   0   0   0   0   0  0   0   >12  0   >301   0  DSK   1     1      0
    **********************  >352   0  ADM   0   0   0   1   0   0   0   0   0  0   0   > 9  0   >251   0  OTH   0
    * INSTALLED:         *  >176   0  INS   0   0   0   1   0   0   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   1

TXI 980B     0   0   0   1  >528   1  RES   0   0   0   0   0   0   0   0   0  0   1   >12  0   >301   0  DSK   1     0      1
    **********************  >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0  OTH   0
    * INSTALLED:         *  >176   0  INS   1   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   1

UNI TECH     0   0   1   0  >528   0  RES   0   1   0   0   0   0   0   0   0  0   0   >12  0   >301   0  DSK   0     1      0
    **********************  >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0  OTH   0
    * INSTALLED:         *  >176   1  INS   0   0   0   0   0   0   0   0   0  1   0   > 6  0   >151   0
    *  PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   1

UNI 1004     0   0   2   6  >528   1  RES   6   1   1   0   0   0   0   0   0  0   0   >12  0   >301   0  DSK   0     4      2
    **********************  >352   0  ADM   2   2   0   0   0   1   0   0   1  2   0   > 9  0   >251   0  OTH   0
    * INSTALLED:         *  >176   4  INS   0   2   1   0   0   1   0   1   0  1   2   > 6  0   >151   0
    *  PRIOR 30JUN77   8 *  >  0   2  H.ED  8   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77   0 *            OTH   8   0   0   0   0   0   0   0   0  0   0   > 0  2   >  0   4

UNI 1100     1   0   1   0  >528   1  RES   0   1   0   0   0   0   0   0   0  0   0   >12  0   >301   1  DSK   1     1      1
    **********************  >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0  OTH   1
    * INSTALLED:         *  >176   0  INS   0   0   0   0   0   0   0   0   0  0   1   > 6  0   >151   0
    *  PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  1   >  0   0

UNI 1100/42  0   0   0   1  >528   1  RES   0   1   0   0   0   0   0   0   0  0   0   >12  0   >301   1  DSK   1     1      1
    **********************  >352   0  ADM   0   0   0   0   1   0   0   0   0  0   0   > 9  1   >251   0  OTH   0
    * INSTALLED:         *  >176   0  INS   0   0   0   0   0   1   0   0   0  0   0   > 6  0   >151   0
    *  PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
    *  AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   0

UNI 1106     7   0   5   1  >528   7  RES   1   3   1   0   0   2   0   0   0  0   0   >12  0   >301   5  DSK   6     6      6
    **********************  >352   0  ADM   1   3   0   0   0   0   0   1   0  1   1   > 9  0   >251   1  OTH   2
    * INSTALLED:         *  >176   0  INS   2   0   3   0   0   1   0   0   0  1   0   > 6  1   >151   0
    *  PRIOR 30JUN77   7 *  >  0   0  H.ED  7   0   0   0   0   0   0   0   0  0   0   > 3  4   > 51   0
    *  AFTER 30JUN77   0 *            OTH   4   0   1   2   0   0   0   0   0  0   0   > 0  1   >  0   0
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                                                  SUMMARY OF COMPUTERS

         GROUP 1                              1

        MODEL     NUMBER    NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER   CORE CAP    ADDL       COMM PORTS
  MFG   NO.      LEASED  PURCHASED    AVG     ****                  PERCENT                 *   TAPE    THOUSAND    STORAGE    ***********
                MFG H-CO MFG OTHR  HRS   NO   TYPE N/O 10  20  30  40  50  60  70  80 90 100  DRIVES    OF CHARS   TYPE NO   BTCH INTRACT

  UNI 1108     3   0   4   2    >528   4  RES   1   0   1   0   0   0   0   2   0  0   0   >12  2   >301   3   DSK  4      4      4
        ***********************  >352   0  ADM   0   2   0   0   0   0   1   0   0  0   1   > 9  0   >251   0   OTH  4
        * INSTALLED:          *  >176   0  INS   1   0   1   2   0   0   0   0   0  0   0   > 6  0   >151   1
        *   PRIOR 30JUN77   4 *  >  0   0  H.ED  4   0   0   0   0   0   0   0   0  0   0   > 3  2   > 51   0
        *   AFTER 30JUN77   0 *            OTH   4   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   0

  UNI 1110     2   0   4   2    >528   3  RES   1   1   1   0   1   0   0   0   2  0   0   >12  0   >301   5   DSK  4      4      4
        ***********************  >352   1  ADM   3   0   1   2   0   0   0   0   0  0   0   > 9  1   >251   0   OTH  3
        * INSTALLED:          *  >176   1  INS   1   0   1   2   1   0   0   1   0  0   0   > 6  1   >151   0
        *   PRIOR 30JUN77   6 *  >  0   0  H.ED  5   0   1   0   0   0   0   0   0  0   0   > 3  3   > 51   0
        *   AFTER 30JUN77   0 *            OTH   4   2   0   0   0   0   0   0   0  0   0   > 0  0   >  0   0

  UNI 1218     0   0   1   0    >528   0  RES   0   0   0   0   0   0   0   0   0  0   1   >12  0   >301   0   DSK  0      1      0
        ***********************  >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH  0
        * INSTALLED:          *  >176   1  INS   1   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
        *   PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
        *   AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   1

  UNI 1900     2   0   0   0    >528   0  RES   2   1   0   0   0   0   0   0   0  0   0   >12  0   >301   0   DSK  2      1      1
        ***********************  >352   1  ADM   1   0   1   0   0   0   0   0   0  0   1   > 9  0   >251   0   OTH  0
        * INSTALLED:          *  >176   0  INS   2   0   0   0   0   0   0   0   1  0   0   > 6  0   >151   0
        *   PRIOR 30JUN77   3 *  >  0   1  H.ED  3   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   2
        *   AFTER 30JUN77   0 *            OTH   3   0   0   0   0   0   0   0   0  0   0   > 0  2   >  0   0

  UNI 418-I    0   0   1   0    >528   1  RES   0   0   0   0   0   0   0   0   0  0   1   >12  0   >301   0   DSK  0      0      0
        ***********************  >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH  0
        * INSTALLED:          *  >176   0  INS   1   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
        *   PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
        *   AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  1   >  0   1

  UNI 418-II   0   0   1   0    >528   1  RES   0   0   0   0   0   0   0   0   0  0   1   >12  0   >301   0   DSK  0      0      0
        ***********************  >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH  0
        * INSTALLED:          *  >176   0  INS   1   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
        *   PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   0
        *   AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  1   >  0   1

  UNI 418-III  0   0   1   0    >528   1  RES   0   0   0   0   0   0   0   0   0  0   1   >12  0   >301   0   DSK  0      0      0
        ***********************  >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH  0
        * INSTALLED:          *  >176   0  INS   1   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
        *   PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  1   > 51   0
        *   AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   1

  UNI 70       0   0   0   0    >528   0  RES   1   0   0   0   0   0   0   0   0  0   0   >12  0   >301   0   DSK  1      0      0
        ***********************  >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0   > 9  0   >251   0   OTH  0
        * INSTALLED:          *  >176   1  INS   1   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
        *   PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   1
        *   AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  1   >  0   0

  UNI 70/145   0   0   0   1    >528   0  RES   0   1   0   0   0   0   0   0   0  0   0   >12  0   >301   0   DSK  1      0      0
        ***********************  >352   1  ADM   0   0   0   0   0   0   0   0   0  1   0   > 9  0   >251   0   OTH  0
        * INSTALLED:          *  >176   0  INS   0   1   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
        *   PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  0   > 51   1
        *   AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  1   >  0   0

  UNI 70/2     0   0   1   0    >528   1  RES   1   0   0   0   0   0   0   0   0  0   0   >12  0   >301   0   DSK  1      0      0
        ***********************  >352   0  ADM   0   0   0   0   0   0   0   0   0  0   1   > 9  0   >251   1   OTH  0
        * INSTALLED:          *  >176   0  INS   1   0   0   0   0   0   0   0   0  0   0   > 6  0   >151   0
        *   PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  1   > 51   0
        *   AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   0

  UNI 70/3     3   0   0   0    >528   1  RES   1   2   0   0   0   0   0   0   0  0   0   >12  0   >301   0   DSK  3      2      3
        ***********************  >352   1  ADM   1   0   0   0   1   1   0   0   0  0   0   > 9  0   >251   3   OTH  2
        * INSTALLED:          *  >176   0  INS   1   0   0   1   0   1   0   0   0  0   0   > 6  0   >151   0
        *   PRIOR 30JUN77   3 *  >  0   0  H.ED  3   0   0   0   0   0   0   0   0  0   0   > 3  3   > 51   0
        *   AFTER 30JUN77   0 *            OTH   1   1   1   0   0   0   0   0   0  0   0   > 0  0   >  0   0

  UNI 70/35    1   0   0   0    >528   0  RES   1   0   1   0   0   0   0   0   0  0   0   >12  0   >301   0   DSK  2      1      0
        ***********************  >352   0  ADM   1   0   0   0   0   1   0   0   0  0   0   > 9  0   >251   0   OTH  0
        * INSTALLED:          *  >176   0  INS   1   0   0   1   0   0   0   0   0  0   0   > 6  0   >151   0
        *   PRIOR 30JUN77   2 *  >  0   1  H.ED  2   0   0   0   0   0   0   0   0  0   0   > 3  1   > 51   2
        *   AFTER 30JUN77   0 *            OTH   2   0   0   0   0   0   0   0   0  0   0   > 0  1   >  0   0

  UNI 70/35E   0   0   1   0    >528   0  RES   1   0   0   0   0   0   0   0   0  0   0   >12  0   >301   0   DSK  1      0      0
        ***********************  >352   0  ADM   0   0   0   0   0   1   0   0   0  0   0   > 9  0   >251   0   OTH  0
        * INSTALLED:          *  >176   1  INS   0   0   0   0   0   1   0   0   0  0   0   > 6  0   >151   0
        *   PRIOR 30JUN77   1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0   > 3  1   > 51   1
        *   AFTER 30JUN77   0 *            OTH   1   0   0   0   0   0   0   0   0  0   0   > 0  0   >  0   0

  UNI 70/46    0   0   1   2    >528   0  RES   2   1   0   0   0   0   0   0   0  0   0   >12  0   >301   0   DSK  3      0      1
        ***********************  >352   1  ADM   0   0   0   0   0   0   1   0   0  2   0   > 9  0   >251   2   OTH  1
        * INSTALLED:          *  >176   1  INS   2   0   0   0   1   0   0   0   0  0   0   > 6  0   >151   0
        *   PRIOR 30JUN77   2 *  >  0   1  H.ED  3   0   0   0   0   0   0   0   0  0   0   > 3  1   > 51   1
        *   AFTER 30JUN77   1 *            OTH   3   0   0   0   0   0   0   0   0  0   0   > 0  1   >  0   0
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                                          SUMMARY OF COMPUTERS
      GROUP (                             )

    MODEL    NUMBER    NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER  CORE CAP  ADDL     COMM PORTS
MFG  NO.     LEASED  PURCHASED    AVG    ****                  PERCENT                *   TAPE    THOUSAND  STORAGE  ***********
      .     MFG H-CO MFG OTHR  HRS   NO  TYPE N/O 10  20  30  40  50  60  70  80  90 100  DRIVES  OF CHARS  TYPE NO  BTCH INTRACT

UNI 70/46     1    0    2    2  >528   2  RES   3   2   1   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  5     3       5
        **********************  >352   2  ADM   2   0   0   0   1   1   1   0   0   0   1  > 9  0  >251   5  OTH  3
      * INSTALLED:           *  >176   1  INS   3   0   0   1   1   0   1   0   0   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77     6 *  >  0   0  H.ED  6   0   0   0   0   0   0   0   0   0   0  > 3  3  > 51   0
      *  AFTER 30JUN77     0 *            OTH   4   1   0   0   0   0   0   0   0   0   1  > 0  2  >  0   0

UNI 70/7      2    0    2    0  >528   2  RES   1   2   0   0   0   1   0   0   0   0   0  >12  0  >301   4  DSK  4     2       3
        **********************  >352   2  ADM   0   0   1   1   0   1   0   0   0   0   1  > 9  1  >251   0  OTH  4
      * INSTALLED:           *  >176   0  INS   1   0   0   1   2   0   0   0   0   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77     4 *  >  0   0  H.ED  4   0   0   0   0   0   0   0   0   0   0  > 3  2  > 51   0
      *  AFTER 30JUN77     0 *            OTH   3   0   0   1   0   0   0   0   0   0   0  > 0  1  >  0   0

UNI 700       3    0    0    0  >528   0  RES   3   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  3     1       0
        **********************  >352   0  ADM   1   0   1   0   0   0   0   0   0   0   1  > 9  0  >251   0  OTH  0
      * INSTALLED:           *  >176   2  INS   2   0   0   0   0   0   0   0   0   0   1  > 6  0  >151   0
      *  PRIOR 30JUN77     3 *  >  0   0  H.ED  3   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   2
      *  AFTER 30JUN77     0 *            OTH   2   0   0   0   0   0   0   0   1   0   0  > 0  0  >  0   0

UNI 90/30     4    0    0    0  >528   2  RES   4   0   0   0   0   0   0   0   0   0   0  >12  0  >301   1  DSK  4     2       2
        **********************  >352   0  ADM   1   0   0   0   0   2   1   0   0   0   0  > 9  0  >251   0  OTH  0
      * INSTALLED:           *  >176   1  INS   1   0   0   0   1   2   0   0   0   0   0  > 6  0  >151   1
      *  PRIOR 30JUN77     4 *  >  0   0  H.ED  4   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   2
      *  AFTER 30JUN77     0 *            OTH   4   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

UNI 90/60     3    1    2    0  >528   0  RES   3   3   0   0   0   0   0   0   0   0   0  >12  0  >301   5  DSK  6     2       5
        **********************  >352   2  ADM   1   0   0   0   0   1   2   1   0   0   1  > 9  0  >251   1  OTH  1
      * INSTALLED:           *  >176   2  INS   2   0   1   0   3   0   0   0   0   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77     4 *  >  0   0  H.ED  6   0   0   0   0   0   0   0   0   0   0  > 3  4  > 51   0
      *  AFTER 30JUN77     2 *            OTH   6   0   0   0   0   0   0   0   0   0   0  > 0  2  >  0   0

UNI 9200      1    0    0    2  >528   1  RES   4   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  1     2       0
        **********************  >352   0  ADM   2   0   0   0   0   0   0   0   1   0   1  > 9  0  >251   0  OTH  0
      * INSTALLED:           *  >176   0  INS   3   0   1   0   0   0   0   0   0   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77     4 *  >  0   0  H.ED  4   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77     0 *            OTH   4   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   2

UNI 9300      5    0    2    1  >528   1  RES   4   2   1   0   0   0   0   0   0   0   1  >12  0  >301   0  DSK  2     3       0
        **********************  >352   0  ADM   5   0   0   0   1   0   0   1   0   0   1  > 9  0  >251   0  OTH  0
      * INSTALLED:           *  >176   6  INS   3   0   0   1   0   0   1   0   1   2   0  > 6  0  >151   0
      *  PRIOR 30JUN77     8 *  >  0   0  H.ED  8   0   0   0   0   0   0   0   0   0   0  > 3  3  > 51   0
      *  AFTER 30JUN77     0 *            OTH   8   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   7

UNI 9400      1    0    0    0  >528   0  RES   2   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  1     1       0
        **********************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   1  > 9  0  >251   0  OTH  0
      * INSTALLED:           *  >176   1  INS   2   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   1
      *  PRIOR 30JUN77     2 *  >  0   0  H.ED  2   0   0   0   0   0   0   0   0   0   0  > 3  1  > 51   0
      *  AFTER 30JUN77     0 *            OTH   2   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

UNI 9480      0    0    1    0  >528   0  RES   0   1   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  1     0       1
        **********************  >352   1  ADM   0   0   0   0   0   0   1   0   0   0   0  > 9  0  >251   0  OTH  0
      * INSTALLED:           *  >176   0  INS   0   0   0   0   1   0   0   0   0   0   0  > 6  0  >151   1
      *  PRIOR 30JUN77     1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77     0 *            OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

UNK           0    0    1    0  >528   0  RES  21   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  1     0       0
        **********************  >352   0  ADM  21   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
      * INSTALLED:           *  >176   0  INS  21   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   1
      *  PRIOR 30JUN77    21 *  >  0   0  H.ED 21   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77     0 *            OTH  21   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0

UNI 1106      0    0    0    0  >528   0  RES   0   0   0   0   0   0   0   0   0   0   0  >12  0  >301   0  DSK  0     0       0
        **********************  >352   0  ADM   0   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
      * INSTALLED:           *  >176   0  INS   0   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77     0 *  >  0   0  H.ED  0   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77     0 *            OTH   0   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   0

VAR FT-80     0    0    1    0  >528   1  RES   0   0   0   0   0   0   0   0   0   0   1  >12  0  >301   0  DSK  1     0       1
        **********************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
      * INSTALLED:           *  >176   0  INS   1   0   0   0   0   0   0   0   0   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77     1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   0
      *  AFTER 30JUN77     0 *            OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  0  >  0   1

VAR V72       0    0    2    0  >528   1  RES   3   0   0   1   0   0   0   0   0   0   0  >12  0  >301   0  DSK  2     1       1
        **********************  >352   0  ADM   2   1   1   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
      * INSTALLED:           *  >176   0  INS   2   0   0   0   0   1   0   0   0   1   0  > 6  0  >151   0
      *  PRIOR 30JUN77     4 *  >  0   1  H.ED  4   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
      *  AFTER 30JUN77     0 *            OTH   4   0   0   0   0   0   0   0   0   0   0  > 0  2  >  0   0

VAR V73       0    0    1    0  >528   0  RES   0   0   0   0   0   1   0   0   0   0   0  >12  0  >301   0  DSK  1     0       0
        **********************  >352   0  ADM   1   0   0   0   0   0   0   0   0   0   0  > 9  0  >251   0  OTH  0
      * INSTALLED:           *  >176   0  INS   0   0   0   0   0   1   0   0   0   0   0  > 6  0  >151   0
      *  PRIOR 30JUN77     1 *  >  0   0  H.ED  1   0   0   0   0   0   0   0   0   0   0  > 3  0  > 51   1
      *  AFTER 30JUN77     0 *            OTH   1   0   0   0   0   0   0   0   0   0   0  > 0  1  >  0   0
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                                              SUMMARY OF COMPUTERS
     GROUP I                          )

     MODEL     NUMBER    NUMBER    AVBLE/MO ************ PERCENT USAGE BY TYPE ************ NUMBER   CORE CAP  ADDL      COMM PORTS
MFG  NO.       LEASED   PURCHASED    AVG    ****                    PERCENT               * TAPE     THOUSAND  STORAGE   ***********
             MFG H-CO  MFG OTHR   HRS   NO  TYPE N/O 10  20  30  40  50  60  70  80 90 100  DRIVES   OF CHARS  TYPE NO  BTCH INTRACT

VAR 1024       0    0    0    0  >528    0  RES   1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  0     0      0
     ***********************     >352    0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          *     >176    0  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   1 *     >  0    0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *                OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

VAR 620        0    0    2    0  >528    0  RES   2   0   0   0   0   1   0   0   0  0   3  >12  0  >301   0  DSK  0     1      1
     ***********************     >352    0  ADM   6   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          *     >176    2  INS   5   0   0   0   0   1   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   6 *     >  0    0  H.ED  6   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   1
     *   AFTER 30JUN77   0 *                OTH   6   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   1

VAR 620A       0    0    3    0  >528    3  RES   0   0   0   0   0   3   0   0   0  0   0  >12  0  >301   0  DSK  0     0      3
     ***********************     >352    0  ADM   3   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          *     >176    0  INS   0   0   0   0   0   3   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   3 *     >  0    0  H.ED  3   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *                OTH   3   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   3

VAR 620F       0    0    2    0  >528    1  RES   2   0   0   0   0   0   0   0   0  0   1  >12  0  >301   0  DSK  0     0      2
     ***********************     >352    0  ADM   3   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          *     >176    0  INS   3   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   3 *     >  0    0  H.ED  3   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *                OTH   3   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   2

VAR 620I       0    0   11    1  >528   12  RES   3   0   0   0   0   0   0   0  10  0   2  >12  0  >301   0  DSK 10     0     11
     ***********************     >352    0  ADM  15   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          *     >176    0  INS   5   0  10   0   0   C   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77  15 *     >  0    0  H.ED 15   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *                OTH  15   0   0   0   0   0   0   0   0  0   0  > 0 11  >  0  12

VAR 620L       0    0    3    0  >528    3  RES   0   0   0   0   0   0   0   0   0  0   3  >12  0  >301   0  DSK  0     0      3
     ***********************     >352    0  ADM   3   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  CTH  0
     * INSTALLED:          *     >176    0  INS   3   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   3 *     >  0    0  H.ED  3   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   1
     *   AFTER 30JUN77   0 *                OTH   3   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   2

WAN            0    0    1    0  >528    0  RES   0   0   0   0   0   0   0   0   0  0   1  >12  0  >301   0  DSK  0     0      1
     ***********************     >352    0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          *     >176    0  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   1 *     >  0    1  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *                OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   1

WAN WCS        0    0    1    0  >528    0  RES   1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  0     0      0
     ***********************     >352    0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   C  CTH  0
     * INSTALLED:          *     >176    1  INS   0   0   0   0   0   0   0   0   0  0   1  > 6  0  >151   0
     *   PRIOR 30JUN77   1 *     >  0    0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *                OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1  >  0   1

WAN WCS-20     0    0    1    0  >528    0  RES   0   0   0   0   0   0   0   1   0  0   0  >12  0  >301   0  DSK  1     1      1
     ***********************     >352    0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  CTH  0
     * INSTALLED:          *     >176    0  INS   0   0   0   1   0   0   0   0   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   1 *     >  0    1  H.ED  1   0   0   0   0   C   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *                OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   1

WAN 2200       1    1    9    0  >528    1  RES  11   3   1   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  1     1      5
     ***********************     >352    0  ADM  10   2   0   0   0   0   0   0   0  0   3  > 9  0  >251   0  OTH  0
     * INSTALLED:          *     >176    6  INS   6   0   0   0   0   0   0   0   2  3   4  > 6  0  >151   1
     *   PRIOR 30JUN77  15 *     >  0    4  H.ED 15   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *                OTH  15   0   0   0   0   0   0   0   0  0   0  > 0  4  >  0  10

WAN 2200-B     0    0    4    0  >528    1  RES   2   1   1   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  2     0      2
     ***********************     >352    0  ADM   2   1   2   0   0   0   0   0   0  0   0  > 9  0  >251   0  CTH  0
     * INSTALLED:          *     >176    3  INS   1   0   0   0   0   0   0   1   1  1   1  > 6  0  >151   0
     *   PRIOR 30JUN77   5 *     >  0    0  H.ED  4   1   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *                OTH   4   1   0   0   0   0   0   0   0  0   0  > 0  3  >  0   4

WAN 2200-T     0    0    1    1  >528    0  RES   1   0   1   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  1     0      1
     ***********************     >352    0  ADM   0   0   1   0   0   1   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          *     >176    1  INS   0   0   0   0   0   1   0   1   0  0   0  > 6  0  >151   0
     *   PRIOR 30JUN77   2 *     >  0    1  H.ED  2   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *                OTH   2   0   0   0   0   0   0   0   0  0   0  > 0  2  >  0   2

WAN 700        0    0    1    0  >528    0  RES   1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  0     0      0
     ***********************     >352    0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          *     >176    0  INS   0   0   0   0   0   C   0   0   0  0   1  > 6  0  >151   0
     *   PRIOR 30JUN77   1 *     >  0    0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *                OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

WAN 700-B      0    0    1    0  >528    0  RES   1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  0     0      0
     ***********************     >352    0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  OTH  0
     * INSTALLED:          *     >176    0  INS   0   0   0   0   0   0   0   0   0  0   1  > 6  0  >151   0
     *   PRIOR 30JUN77   1 *     >  0    1  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
     *   AFTER 30JUN77   0 *                OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   1
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                                                    SUMMARY OF CCMPUTERS
     GROUP I                              1

     MODEL    NUMBER    NUMBER    AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER    CORE CAP   ADDL     COMM PORTS
MFG  NO.      LEASED   PURCHASED    AVG    ****                 PERCENT                  *  TAPE      THOUSAND   STORAGE  ***********
             MFG H-CO MFG OTHR   HRS    NO  TYPE N/O 10  20  30  40  50  60  70  80 90 100  DRIVES    OF CHARS   TYPE NO  BTCH INTRACT

WAN 720-C     0    0    1    0  >528    0  RES   0   0   0   1   0   0   0   0   0  0   0  >12  0   >301   0  DSK  0     0       0
    **********************      >352    0  ADM   0   1   0   0   0   0   0   0   0  0   0  > 9  0   >251   0  OTH  0
    * INSTALLED:            *   >176    1  INS   0   0   0   0   0   0   0   1   0  0   0  > 6  0   >151   0
    *  PRIOR 30JUN77     1  *   >  0    0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
    *  AFTER 30JUN77     0  *              OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1   >  0   1

WES           0    0    0    0  >528    0  RES   0   0   0   0   0   0   0   0   0  0   1  >12  0   >301   0  DSK  0     0       0
    **********************      >352    0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0   >251   0  OTH  0
    * INSTALLED:            *   >176    1  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0   >151   0
    *  PPIOR 30JUN77     1  *   >  0    0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
    *  AFYER 30JUN77     0  *              OTH   1   0   0   0   0   C   0   0   0  0   0  > 0  0   >  0   1

XDS           2    1    3    1  >528    2  RES   0   0   2   0   0   0   0   0   0  1   0  >12  0   >301   3  DSK  3     2       3
    **********************      >352    1  ADM   1   0   0   1   1   0   0   0   0  0   0  > 9  0   >251   0  OTH  0
    * INSTALLED:            *   >176    0  INS   0   1   0   0   2   0   0   0   0  0   0  > 6  0   >151   0
    *  PRIOR 30JUN77     3  *   >  0    0  H.ED  3   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
    *  AFTER 30JUN77     0  *              OTH   2   0   1   0   0   0   0   0   0  0   0  > 0  3   >  0   0

XDS SIGMA3    0    0    1    0  >528    1  RES   1   0   0   0   0   0   0   0   0  0   1  >12  0   >301   0  DSK  1     1       1
    **********************      >352    0  ADM   2   0   0   0   0   0   0   0   0  0   0  > 9  0   >251   0  OTH  0
    * INSTALLED:            *   >176    0  INS   2   0   0   0   0   0   0   0   0  0   0  > 6  0   >151   0
    *  PRIOR 30JUN77     2  *   >  0    0  H.ED  2   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   1
    *  AFTER 30JUN77     0  *              OTH   2   0   0   0   0   0   0   0   0  0   0  > 0  1   >  0   0

XDS SIGMA5    0    0    1    0  >528    1  RES   3   0   0   0   0   0   0   0   0  0   2  >12  0   >301   0  DSK  1     1       0
    **********************      >352    0  ADM   4   1   0   0   0   0   0   0   0  0   0  > 9  0   >251   0  OTH  0
    * INSTALLED:            *   >176    0  INS   5   0   0   0   0   0   0   0   0  0   0  > 6  0   >151   0
    *  PRICR 30JUN77     5  *   >  0    0  H.ED  5   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   1
    *  AFTER 30JUN77     0  *              OTH   5   0   0   0   0   0   0   0   0  0   0  > 0  1   >  0   0

XDS SIGMA6    6    0    3    0  >528    3  RES   4   2   0   0   0   0   0   0   0  0   0  >12  0   >301   3  DSK  6     4       6
    **********************      >352    1  ADM   0   0   0   0   0   2   1   1   1  1   0  > 9  0   >251   0  OTH  2
    * INSTALLED:            *   >176    2  INS   0   1   0   3   0   2   0   0   0  0   0  > 6  0   >151   0
    *  PRICR 30JUN77     6  *   >  0    0  H.ED  5   1   0   0   0   0   0   0   0  0   0  > 3  1   > 51   3
    *  AFTER 30JUN77     0  *              OTH   6   0   0   0   0   0   0   0   0  0   0  > 0  5   >  0   0

XDS SIGMA7    1    0    7    0  >528    4  RES   1   2   0   1   0   0   0   0   1  0   2  >12  0   >301   4  DSK  7     6       6
    **********************      >352    2  ADM   2   1   1   2   0   1   0   0   0  0   0  > 9  0   >251   2  OTH  1
    * INSTALLEC:            *   >176    1  INS   2   0   1   0   2   0   1   1   0  0   0  > 6  0   >151   0
    *  PRICR 30JUN77     7  *   >  0    0  H.ED  6   1   0   0   0   0   0   0   0  0   0  > 3  2   > 51   1
    *  AFTER 30JUN77     0  *              OTH   4   2   1   0   0   0   0   0   0  0   0  > 0  5   >  0   0

XDS SIGMA9    3    0    8    0  >528    7  RES   4   0   3   1   0   0   0   0   0  0   0  >12  0   >301   7  DSK  8     8       8
    **********************      >352    1  ADM   1   0   0   1   1   2   1   0   0  1   1  > 9  0   >251   0  OTH  6
    * INSTALLED:            *   >176    0  INS   2   1   0   1   1   2   0   1   0  0   0  > 6  0   >151   0
    *  PRICR 30JUN77     8  *   >  0    0  H.ED  4   4   0   0   0   0   0   0   0  0   0  > 3  4   > 51   1
    *  AFTER 30JUN77     0  *              OTH   5   3   0   0   0   0   0   0   0  0   0  > 0  4   >  0   0

XDS 530       4    0    4    0  >528    1  RES   2   1   1   0   1   0   1   0   0  0   0  >12  0   >301   0  DSK  6     3       1
    **********************      >352    2  ADM   2   1   1   0   0   0   1   0   0  0   1  > 9  0   >251   0  OTH  0
    * INSTALLED:            *   >176    3  INS   1   0   1   0   1   0   1   1   0  0   1  > 6  0   >151   0
    *  PRICR 30JUN77     6  *   >  0    0  H.ED  6   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   5
    *  AFTER 30JUN77     C  *              OTH   6   0   0   0   0   0   0   0   0  0   0  > 0  5   >  0   1

XDS 530A      1    0    0    0  >528    0  RES   0   1   0   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK  1     1       1
    **********************      >352    0  ADM   0   1   0   0   0   0   0   0   0  0   0  > 9  0   >251   0  OTH  0
    * INSTALLED:            *   >176    1  INS   0   0   0   0   0   0   0   0   0  1   0  > 6  0   >151   0
    *  PRICR 30JUN77     1  *   >  0    0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   1
    *  AFTER 30JUN77     0  *              OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0

XDS 560       1    0    5    0  >528    4  RES   2   2   1   0   0   0   0   0   0  0   0  >12  0   >301   5  DSK  5     3       5
    **********************      >352    0  ADM   0   0   0   0   1   1   3   0   0  0   0  > 9  0   >251   0  OTH  2
    * INSTALLED:            *   >176    1  INS   0   0   1   0   2   1   1   0   0  0   0  > 6  0   >151   0
    *  PRIOR 30JUN77     5  *   >  0    0  H.ED  5   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
    *  AFTER 30JUN77     0  *              OTH   4   1   0   0   0   0   0   0   0  0   0  > 0  5   >  0   0

XDS 8310      0    0    1    0  >528    1  RES   1   0   0   0   0   0   0   0   0  0   0  >12  0   >301   1  DSK  1     0       1
    **********************      >352    0  ADM   0   0   0   0   1   0   0   0   0  0   0  > 9  0   >251   0  OTH  0
    * INSTALLED:            *   >176    0  INS   0   0   0   0   0   0   1   0   0  0   0  > 6  0   >151   0
    *  PRICR 30JUN77     1  *   >  0    0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
    *  AFTER 30JUN77     0  *              OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1   >  0   0

ZIL 6Z80      0    0    0    1  >528    0  RES   0   0   0   0   0   1   0   0   0  0   0  >12  0   >301   0  DSK  0     0       1
    **********************      >352    0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0   >251   0  OTH  0
    * INSTALLED:            *   >176    1  INS   0   0   0   0   0   1   0   0   0  0   0  > 6  0   >151   0
    *  PRIOR 30JUN77     1  *   >  0    0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
    *  AFTER 30JUN77     0  *              OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  1   >  0   1

4PH           0    0    1    0  >528    0  RES   1   0   0   0   0   0   0   0   0  0   0  >12  0   >301   0  DSK  0     0       0
    **********************      >352    0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0   >251   0  CTH  0
    * INSTALLED:            *   >176    0  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0   >151   0
    *  PRIOR 30JUN77     1  *   >  0    0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0   > 51   0
    *  AFTER 30JUN77     0  *              OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0   >  0   0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                        UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                      / SUMMARY OF COMPUTERS
    GROUP I                         1

   MODEL     NUMBER    NUMBER   AVBLE/MO ************ PERCENT USAGE BY TYPE ************  NUMBER   CORE CAP   ADDL      COMM PORTS
MFG  NO.     LEASED  PURCHASED   AVG     ****                 PERCENT                 *  TAPE     THOUSAND   STORAGE   ***********
           MFG H-CO MFG OTHR HRS   NO   TYPE N/0 10  20  30  40  50  60  70  80 90 100  DRIVES   OF CHARS   TYPE NO   ATCH INTRACT

4PH 2800     0    0    0    0  >528   0  RES   1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  0      0        0
      ********************** >352   0  ADM   1   0   0   0   0   0   0   0   0  0   0  > 9  0  >251   0  CTM  0
      * INSTALLED:         * >176   0  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
      *   PRIOR 30JUN77  1 * >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   0
      *   AFTER 30JUN77  0 *             OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

4PH 40       1    0    0    0  >528   0  RES   1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  1      1        0
      ********************** >352   0  ADM   0   0   0   0   0   0   0   0   0  0   1  > 9  0  >251   0  CTM  0
      * INSTALLED:         * >176   0  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
      *   PRIOR 30JUN77  1 * >  0   1  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   1
      *   AFTER 30JUN77  0 *             OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0

4PH 70       0    0    1    0  >528   1  RES   1   0   0   0   0   0   0   0   0  0   0  >12  0  >301   0  DSK  1      1        1
      ********************** >352   0  ADM   0   0   0   0   0   0   0   0   0  0   1  > 9  0  >251   0  CTM  0
      * INSTALLED:         * >176   0  INS   1   0   0   0   0   0   0   0   0  0   0  > 6  0  >151   0
      *   PRIOR 30JUN77  1 * >  0   0  H.ED  1   0   0   0   0   0   0   0   0  0   0  > 3  0  > 51   1
      *   AFTER 30JUN77  0 *             OTH   1   0   0   0   0   0   0   0   0  0   0  > 0  0  >  0   0
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VIII. SUMMARIES FROM FORM 2
INSTRUCTIONAL AND RESEARCH USE BY ACADEMIC AREA FOR PERIOD JULY 1, 1976 - JUNE 30, 1977

The following variables and levels were used for summarizing the responses:

Type of Control	Highest Degree Offered	Fall 1975 Enrollment Class
1. Public	1. Associate	1. Less than 500
2. Private	2. Bachelor's	2. 500 - 2,499
	3. Master's	3. 2,500 - 9,999
	4. Doctorate	4. 10,000 -19,999
		5. 20,000 and above

Summaries for the elementary (three-way) groups, the individual levels (one-way) of the control variables, and the total population are presented provided that there are enough institutions included and/or reporting in the category to preclude identification of the institutions involved (i.e. at least two institutions must have reported in a group for the summary of that group to have been included).

Each group summary is identified by the levels of the three control variables. For example, group (Public, Associate, Below 500) identifies the summary for all public institutions offering at most the associate degree and having had an enrollment of less than 500 students during Fall 1975. Since all summaries for FORM 2 are identical in format, only one will be discussed here as a guide. The total group is chosen for this purpose, i.e. group (, ,).

Research and Instructional use data is summarized for each academic area. Referring to group (, ,) from the record keeping item we see that 1094 institutions reported usage in 1175 installations. Engineering students (undergraduate and graduate) in a total of 7356 courses, which were taught at least once during the year 1976-77, made some use of the computer. One hundred eighty seven thousand eight hundred seventy seven (187,877) students in Engineering used computers in this group during the year in their course work. The total costs of computer services for the students in these courses were $13,310,000. This cost figure is the accumulation of costs reported by 186 installations in 174 institutions.

Reported costs of computer services for research and instruction in Engineering was $27,537,000. Five million five hundred twenty five thousand ($5,525,000) was reported for faculty sponsored research, $4,389,000 for non-sponsored faculty research, $348,000 for software development and $450,000 for other (MISC) uses. Three million five hundred fifteen thousand ($3,515,000) was reported by 73 installations in 65 institutions for student research.

Under other computer use (OTHR COMP), we see that 505 installations supplying services to engineering reported that other on-campus installations were not utilized (CODE 0), another 131 installations reported other usage of other facilities on-campus. Seventy (70) installations reported that their users used other computer installations off-campus. Under MODE/Type of INSTR USE we see that 264 installations used problem solving mode (PROB SOLV), 151 were using simulation (SIMUL), 30 were doing computer aided testing (CAT), 46 provided computer aided instruction (CAI), and 10 were using computer managed instruction (CMI).

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                            SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

     GROUP 1                           1

          TOTAL NUMBER OF INSTITUTIONS             = 3136     TOTAL NUMBER OF INSTALLATIONS REPORTED      = 1595
          TOTAL NUMBER OF INSTITUTIONS REPORTING = 1822     TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  = 1248

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT  106:  COLLEGE OR UNIV.  2201   COMMERCIAL   42

                   * INSTALLATION FUNCTION *                                 * LOWEST LEVEL OF RECORD KEEPING *
                 NETWORK   NETWORK    LOCAL                    NO                 SCHOOL                COURSE    COURSES    INDIVIDUAL
                  ONLY     & LOCAL    ONLY                  RECORDS    CAMPUS    OR COL      DEPT      NUMBER    BY SECT     STUDENTS

          INSTL:   68        305       818                    400        91        100        260        99         71          154
          INST:    64        281       717                    355        90         98        242        95         70          144
          (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS      TOTL STDNT USE, COURSEWK      USE BY FACULTY AND STAFF      *****      MODE/TYPE OF INSTR USE       C   OTHR COMP
AND DISCIPLINES      **** UNDGR AND GRAD ****      FAC RESRCH  *** OTHER ***     TOTAL    PROB                           D    ON   OFF
                   COURSES STDNTS THOUS$ RESRCH    SPON  N-SPON SFT-DV  MISC     *****    SOLV SIMUL  CAT   CAI   CMI   E   CAMP CAMP

ENGINEERING          7356 187877  13310   3515     5525   4389    348    450     27537    264   151    30    46    10  0-   505   556
                                                                                                                       1-   131    70
          INSTL:  288     277     186      73       88    103     34     17       215    264   151    30    46    10  2-     7    19
          INST:   261     254     174      65       72     94     31     17       190    238   136    29    43    10
          (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND    2408  69825   1799   1263     3947   3777    588    235     11609    195   133    59    61    19  0-   238   244
 LIFE SCIENCES                                                                                                         1-    76    65
          INSTL:  253     240     164      69      104    118     39     18       215    195   133    59    61    19  2-    14    20
          INST:   238     224     158      66       88    110     37     18       193    179   124    59    56    19
          (NUMBER REPORTING PER CATEGORY)

COMPUTER             8651 292921  17201    909      788   1775    658    218     21549    452   203    72   105    43  0-   454   477
 SCIENCES                                                                                                              1-   148   117
          INSTL:  570     544     345      87       60    127     77     34       365    452   203    72   105    43  2-     6    15
          INST:   551     529     334      82       55    125     76     33       349    435   198    72   105    43
          (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND      3716 125145   4762    306     1163   1648    230    159      8268    435   165    57    95    20  0-   485   468
 STATISTICS                                                                                                            1-    87    96
          INSTL:  532     491     287      67       67    127     41     14       320    435   165    57    95    20  2-     8    16
          INST:   516     479     282      66       64    124     38     14       309    424   161    57    93    20
          (NUMBER REPORTING PER CATEGORY)

PHYSICAL             2418  84053   3138   7058     7034  16671    474    565     34940    312   161    64    81    27  0-   313   328
 SCIENCES                                                                                                              1-   114    92
          INSTL:  371     347     208      87      105    140     44     25       257    312   161    64    81    27  2-     8    16
          INST:   352     326     200      78       85    129     41     25       231    296   157    64    80    27
          (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY           1325  46905    993    415      397    978     84     49      2916    204    76    58    33    16  0-   236   251
                                                                                                                       1-    71    45
          INSTL:  238     217     135      63       49    109     28     17       189    204    76    58    33    16  2-     3    15
          INST:   236     215     133      62       47    107     28     17       183    201    75    57    32    16
          (NUMBER REPORTING PER CATEGORY)

SOCIAL               3090  85621   2264    947     1417   3057    246    206      8137    221   102    51    44    12  0-   290   256
 SCIENCES                                                                                                              1-    41    65
          INSTL:  282     261     174      59       76    117     33     16       214    221   102    51    44    12  2-    12    22
          INST:   275     256     170      58       70    115     31     16       204    215    99    51    44    12
          (NUMBER REPORTING PER CATEGORY)

EDUCATION            1088  31292    743    505      511    915     82     42      2798    139    52    42    43    13  0-   186   172
                                                                                                                       1-    27    33
          INSTL:  170     158     116      51       47     74     18     13       147    139    52    42    43    13  2-     7    15
          INST:   168     156     115      50       47     74     18     13       145    137    52    42    42    13
          (NUMBER REPORTING PER CATEGORY)

BUSINESS AND         5320 259003  14821   2090      728   4466    452    777     23334    359   243    54    74    27  0-   431   408
 COMMERCE                                                                                                              1-    68    82
          INSTL:  466     444     280      70       55    120     43     29       295    359   243    54    74    27  2-    11    20
          INST:   458     437     273      68       54    117     43     28       286    353   239    54    73    26
          (NUMBER REPORTING PER CATEGORY)

ALL OTHER            2637  86270   4107   1666     4169   5480    710   2585     18717    161    69    51    63    23  0-   224   222
                                                                                                                       1-    56    53
          INSTL:  203     199     142      62       62    106     41     36       212    161    69    51    63    23  2-    15    20
          INST:   197     194     139      60       59    102     40     36       202    155    69    51    62    23
          (NUMBER REPORTING PER CATEGORY)
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              CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA                      PAGE VIII-04
                      UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                              SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

   GROUP (PUBLIC:                    )

        TOTAL NUMBER OF INSTITUTIONS           = 1509      TOTAL NUMBER OF INSTALLATIONS REPORTED      =  992
        TOTAL NUMBER OF INSTITUTIONS REPORTING =  877      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL   =  745

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT   66;   COLLEGE OR UNIV.  156;   COMMERCIAL   12

                  * INSTALLATION FUNCTION *                                   * LOWEST LEVEL OF RECORD KEEPING *
                  NETWORK   NETWORK     LOCAL                  NO                 SCHOOL              COURSE     COURSES    INDIVIDUAL
                   ONLY     & LOCAL     ONLY                 RECORDS    CAMPUS    OR COL      DEPT     NUMBER     BY SECT    STUDENTS

           INSTL:   47        244        451                   225        52        64        175        61         44         108
           INST:    44        223        383                   191        52        62        162        57         44          98
           (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS       TOTL STDNT USE, COURSEWK       USE BY FACULTY AND STAFF         *****     MODE/TYPE OF INSTR USE        C   OTHR COMP
 AND DISCIPLINES      **** UNDGR AND GRAD ****       FAC RESRCH  *** OTHER ***        TOTAL     PROB                          D    ON   OFF
                  COURSES STDNTS THOUS$ RESRCH       SPON  N-SPON SFT-DV  MISC        *****     SOLV SIMUL  CAT  CAI  CMI     E   CAMP CAMP

ENGINEERING         6159 161940  11997    3006       4580   3720   230    209         23742     206   115    25   36    8     0-   330  370
                                                                                                                             1-   103   58
           INSTL:  227    216    149      59          69     79     25     13           167     206   115    25   36    8     2-     6   12
           INST:   204    197    137      51          54     72     23     13           145     185   103    24   33    8
           (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND  2095  61780   1611    1215       3639   3445   540    131         10581     140    88    49   49   17     0-   159  170
 LIFE SCIENCES                                                                                                               1-    58   47
           INSTL:  172    164    129      59          85     93     32     15           164     140    88    49   49   17     2-    12   13
           INST:   157    148    122      56          69     85     30     15           142     124    79    49   44   17
           (NUMBER REPORTING PER CATEGORY)

COMPUTER            7190 251110  13595     622        697   1581   561     81         17337     307   143    57   78   35     0-   288  308
 SCIENCES                                                                                                                    1-   113   89
           INSTL:  378    361    243      71          48    100     59     24           254     307   143    57   78   35     2-     5   10
           INST:   362    349    234      66          43     98     58     23           241     292   138    57   78   35
           (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND     2725  97688 *3992      281       1044   1438   184    152          7091     264    98    46   64   11     0-   278  273
 STATISTICS                                                                                                                  1-    60   62
           INSTL:  311    285    189      54          54     95     28     11           207     264    98    46   64   11     2-     6    9
           INST:   297    275    184      53          51     92     26     11           198     255    94    46   62   11
           (NUMBER REPORTING PER CATEGORY)

PHYSICAL            1709  72016   2610    6893       6491  15860   446    389         32689     192   104    48   59   21     0-   186  201
 SCIENCES                                                                                                                    1-    75   58
           INSTL:  223    209    147      69          80    110     33     17           180     192   104    48   59   21     2-     7   10
           INST:   207    191    140      50          62     99     30     17           157     176   100    48   58   21
           (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY          1007  39728    673     394        318    855    64     46          2350     129    49    47   23   11     0-   145  157
                                                                                                                             1-    46   26
           INSTL:  149    135    101      56          40     84     21     14           137     129    49    47   23   11     2-     2   11
           INST:   147    133     99      55          38     82     21     14           131     127    48    47   22   11
           (NUMBER REPORTING PER CATEGORY)

SOCIAL              2422  72109   1829     907       1279   2785   220     40          7060     142    69    43   31    9     0-   178  164
 SCIENCES                                                                                                                    1-    30   37
           INSTL:  180    167    130      51          61     96     25     12           156     142    69    43   31    9     2-     9   16
           INST:   173    162    126      50          56     94     24     12           148     137    66    43   31    9
           (NUMBER REPORTING PER CATEGORY)

EDUCATION            954  27233    631     498        493    897    74     34          2627     105    38    34   33   13     0-   131  122
                                                                                                                             1-    22   25
           INSTL:  124    112     93      47          42     66     14     12           117     105    38    34   33   13     2-     6   12
           INST:   122    110     92      46          42     66     14     12           115     103    38    34   32   13
           (NUMBER REPORTING PER CATEGORY)

BUSINESS AND        3984 216558   4505     796        376   1706   121    198          7792     244   168    39   54   21     0-   291  272
 COMMERCE                                                                                                                    1-    48   62
           INSTL:  314    298    197      55          43     95     25     21           208     244   168    39   54   21     2-     7   12
           INST:   306    292    190      53          42     92     25     21           201     239   165    39   53   20
           (NUMBER REPORTING PER CATEGORY)

ALL OTHER           2399  72514   3094    1525       3026   4199   606   1651         14101     120    60    43   51   21     0-   155  157
                                                                                                                             1-    44   38
           INSTL:  150    140    107      48          48     85     25     27           156     120    60    43   51   21     2-    12   16
           INST:   144    137    104      46          45     82     28     27           148     114    60    43   50   21
           (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

GROUP (PRIVATE:)

TOTAL NUMBER OF INSTITUTIONS = 1627
TOTAL NUMBER OF INSTITUTIONS REPORTING = 945
TOTAL NUMBER OF INSTALLATIONS REPORTED = 607
TOTAL NUMBER OF INSTITUTIONS RPTING INSTL = 503

USE OF OFF-CAMPUS COMPUTERS BY INSTAL: COOP. OR NON PROFIT 40: COLLEGE OR UNIV. 64: COMMERCIAL 30

	* INSTALLATION FUNCTION *			* LOWEST LEVEL OF RECORD KEEPING *						
	NETWORK ONLY	NETWORK & LOCAL	LOCAL ONLY	NO RECORDS	CAMPUS	SCHOOL OR COL	DEPT	COURSE NUMBER	COURSES BY SECT	INDIVIDUAL STUDENTS
INSTL:	21	61	367	175	39	36	85	38	27	46
INST:	20	58	334	164	38	36	80	38	26	46
(NUMBER REPORTING PER CATEGORY)										

ACADEMIC FIELDS AND DISCIPLINES		TOTL STDNT USE, COURSEWK				USE BY FACULTY AND STAFF				***** TOTAL *****	MODE/TYPE OF INSTR USE					C D E	OTHR COMP	
		**** UNDGR AND GRAD ****				FAC RESRCH		*** OTHER ***										
		COURSES	STDNTS	THOUS$	RESRCH	SPON	N-SPON	SFT-DV	MISC		PROB SOLV	SIMUL	CAT	CAI	CMI		ON CAMP	OFF CAMP
ENGINEERING		1197	25937	1313	509	945	669	118	241	3795	58	36	5	10	2	0-	175	186
																1-	28	12
	INSTL:	61	61	37	14	19	24	9	4	48	58	36	5	10	2	2-	1	7
	INST:	57	57	37	14	18	22	8	4	45	53	33	5	10	2			
	(NUMBER REPORTING PER CATEGORY)																	
ENVIRONMENTAL AND		313	8045	188	48	308	332	48	104	1028	55	45	10	12	2	0-	79	74
LIFE SCIENCES																1-	18	18
	INSTL:	81	76	36	10	19	25	7	3	51	55	45	10	12	2	2-	2	7
	INST:	81	76	36	10	19	25	7	3	51	55	45	10	12	2			
	(NUMBER REPORTING PER CATEGORY)																	
COMPUTER		1461	41811	3606	87	91	194	97	137	4212	145	60	15	27	8	0-	166	169
SCIENCES																1-	35	28
	INSTL:	192	183	102	16	12	27	18	10	111	145	60	15	27	8	2-	1	5
	INST:	189	180	100	16	12	27	18	10	108	143	60	15	27	8			
	(NUMBER REPORTING PER CATEGORY)																	
MATHEMATICS AND		991	27457	770	25	119	210	46	7	1177	171	67	11	31	9	0-	207	195
STATISTICS																1-	27	34
	INSTL:	221	206	98	13	13	32	13	3	113	171	67	11	31	9	2-	2	7
	INST:	219	204	98	13	13	32	12	3	111	169	67	11	31	9			
	(NUMBER REPORTING PER CATEGORY)																	
PHYSICAL		709	12037	528	165	543	811	28	176	2251	120	57	16	22	6	0-	127	127
SCIENCES																1-	39	34
	INSTL:	148	138	61	18	25	30	11	8	77	120	57	16	22	6	2-	1	6
	INST:	145	135	60	18	23	30	11	8	74	118	57	16	22	6			
	(NUMBER REPORTING PER CATEGORY)																	
PSYCHOLOGY		318	7177	320	21	79	123	20	3	566	75	27	11	10	5	0-	91	94
																1-	25	19
	INSTL:	89	82	34	7	9	25	7	3	52	75	27	11	10	5	2-	1	4
	INST:	89	82	34	7	9	25	7	3	52	74	27	10	10	5			
	(NUMBER REPORTING PER CATEGORY)																	
SOCIAL		668	13512	435	40	138	272	26	166	1077	79	33	8	13	3	0-	112	92
SCIENCES																1-	11	28
	INSTL:	102	94	44	8	15	21	8	4	58	79	33	8	13	3	2-	3	6
	INST:	102	94	44	8	14	21	7	4	56	78	33	8	13	3			
	(NUMBER REPORTING PER CATEGORY)																	
EDUCATION		134	4059	112	7	18	18	8	8	171	34	14	8	10	0	0-	55	50
																1-	5	8
	INSTL:	46	46	23	4	5	8	4	1	30	34	14	8	10	0	2-	1	3
	INST:	46	46	23	4	5	8	4	1	30	34	14	8	10	0			
	(NUMBER REPORTING PER CATEGORY)																	
BUSINESS AND		1336	42445	10226	1294	352	2760	331	579	15542	115	75	15	20	6	0-	140	136
COMMERCE																1-	20	20
	INSTL:	152	146	83	15	12	25	18	8	87	115	75	15	20	6	2-	4	8
	INST:	152	145	83	15	12	25	18	7	85	114	74	15	20	6			
	(NUMBER REPORTING PER CATEGORY)																	
ALL OTHER		248	13756	1013	141	1143	1281	104	934	4616	41	9	8	12	2	0-	69	65
																1-	12	15
	INSTL:	53	59	35	14	14	21	12	9	56	41	9	8	12	2	2-	3	4
	INST:	53	57	35	14	14	20	12	9	54	41	9	8	12	2			
	(NUMBER REPORTING PER CATEGORY)																	

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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSCURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                              PAGE VIII-06

         *                           SUMMARY CF INSTRUCTIONAL AND RESEARCH USE

   GROUP (         ASSOCIATE:            )

        TOTAL NUMBER OF INSTITUTIONS             = 1196      TOTAL NUMBER OF INSTALLATIONS REPORTED     =  431
        TOTAL NUMBER OF INSTITUTIONS REPORTING =  655      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =  424

USE CF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT   27:   COLLEGE OR UNIV.    58:   COMMERCIAL   12

                   * INSTALLATION FUNCTION *                                      * LOWEST LEVEL OF RECORD KEEPING *
                   NETWORK   NETWORK    LOCAL                       NO                  SCHOCL                   COURSE    COURSES    INDIVIDUAL
                    ONLY     & LOCAL    ONLY                     RECORDS    CAMPUS    OR COL       DEPT      NUMBER    BY SECT     STUDENTS

           INSTL:    22        67        229                        121        19        40          65          18         17           28
           INST:     21        67        228                        120        19        39          65          18         17           28
           (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS        TOTL STDNT USE, COURSEWK         USE BY FACULTY AND STAFF          *****    MODE/TYPE OF INSTR USE      C    OTHR COMP
 AND DISCIPLINES       **** UNDGR AND GRAD ****         FAC RESRCH  *** OTHER ***          TOTAL    PROB                        D    ON    OFF
                    COURSES STDNTS THOUS$ RESRCH        SPON  N-SPON SFT-DV  MISC          *****    SOLV SIMUL  CAT  CAI  CMI   E    CAMP  CAMP

 ENGINEERING            298   10826    350      2         3      9     12      4            380      82    24    4    13    1  0-    174   175
                                                                                                                             1-     19    17
           INSTL:  93      89     44      2         1      5      6      2             48      82    24    4    13    1  2-      1     2
           INST:   93      89     44      2         1      5      6      2             48      82    24    4    13    1
           (NUMBER REPORTING PER CATEGORY)

 ENVIRONMENTAL AND     263    8348     79      0         6      2     23      2            112      13    12   13    11    4  0-     34    32
  LIFE SCIENCES                                                                                                              1-      3     3
           INSTL:  29      30     21      0         1      1      3      1             23      13    12   13    11    4  2-      1     3
           INST:   29      30     21      0         1      1      3      1             23      13    12   13    11    4
           (NUMBER REPORTING PER CATEGCRY)

 COMPUTER              2290   66422   3846     48         1     60    101     17           4073     136    33   19    32   16  0-    157   152
  SCIENCES                                                                                                                   1-     28    32
           INSTL: 179     176    101      5         1     14     21      7            104     136    33   19    32   16  2-      1     2
           INST:  179     176    101      5         1     14     21      7            104     136    33   19    32   16
           (NUMBER REPORTING PER CATEGCRY)

 MATHEMATICS AND       380   17236   1063     42         2     19     11      2           1139      72    19   10    22    2  0-     91    85
  STATISTICS                                                                                                                 1-      9    13
           INSTL:  92      85     44      2         1      9      5      1             48      72    19   10    22    2  2-      1     3
           INST:   92      85     44      2         1      9      5      1             48      72    19   10    22    2
           (NUMBER REPORTING PER CATEGCRY)

 PHYSICAL              156    9257    301      0         0      3      8      2            314      33    17   10    13    4  0-     42    39
  SCIENCES                                                                                                                   1-      7     8
           INSTL:  42      41     21      0         0      2      4      1             21      33    17   10    13    4  2-      0     2
           INST:   42      41     21      0         0      2      4      1             21      33    17   10    13    4
           (NUMBER REPORTING PER CATEGORY)

 PSYCHOLOGY             56    7745     20      1         0     14      1      2             38      13     5   10     4    1  0-     26   '21
                                                                                                                             1-      1     4
           INSTL:  17      16      7      1         0      6      1      1             13      13     5   10     4    1  2-      0     2
           INST:   17      16      7      1         0      6      1      1             13      13     5   10     4    1
           (NUMBER REPORTING PER CATEGORY)

 SOCIAL                129    8506     64      0         2      5     13      3             87      11     8    8     6    3  0-     27    22
  SCIENCES                                                                                                                   1-      0     3
           INSTL:  20      19     10      0         1      3      3      2             14      11     8    8     6    3  2-      1     3
           INST:   20      19     10      0         1      3      3      2             14      11     8    8     6    3
           (NUMBER REPORTING PER CATEGORY)

 EDUCATICN              20     280     32      0         0      0      0      0             32       1     1    2     1    0  0-      6     3
                                                                                                                             1-      0     0
           INSTL:   3       3      3      0         0      0      0      0              3       1     1    2     1    0  2-      0     3
           INST:    3       3      3      0         0      0      0      0              3       1     1    2     1    0
           (NUMBER REPORTING PER CATEGORY)

 BUSINESS AND          645   23722    584      5         0      1     10     11            611      83    41   11    20    6  0-    112   102
  COMMERCE                                                                                                                   1-     13    23
           INSTL: 119     113     55      2         0      1      3      2             57      83    41   11    20    6  2-      1     1
           INST:  119     113     55      2         0      1      3      2             57      83    41   11    20    6
           (NUMBER REPORTING PER CATEGCRY)

 ALL CTHER             262   14637    831     41        16     12      9     10            919      24    15   10    14    7  0-     45    44
                                                                                                                             1-      4     4
           INSTL:  35      35     21      2         2      4      6      4             27      24    15   10    14    7  2-      0     1
           INST:   35      35     21      2         2      4      6      4             27      24    15   10    14    7
           (NUMBER REPORTING PER CATEGCRY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                               SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

    GROUP (        BACHELORS;          )

        TOTAL NUMBER OF INSTITUTIONS            =  801      TOTAL NUMBER OF INSTALLATIONS REPORTED     =  310
        TOTAL NUMBER OF INSTITUTIONS REPORTING  =  461      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =  290

  USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT   22;   COLLEGE OR UNIV.   47;   COMMERCIAL   17

                 * INSTALLATION FUNCTION *                                    * LOWEST LEVEL OF RECORD KEEPING *
                 NETWORK   NETWORK    LOCAL                      NO                SCHOOL               COURSE    COURSES   INDIVIDUAL
                  ONLY     & LOCAL    ONLY                    RECORDS    CAMPUS    OR COL      DEPT     NUMBER    BY SECT    STUDENTS

           INSTL:   17        33       186                      103        25        18         35        16         5          29
           INST:    17        33       179                      100        25        17         35        16         5          29
           (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS       TOTL STDNT USE, COURSEWK       USE BY FACULTY AND STAFF        *****    MODE/TYPE OF INSTR USE       C   OTHR COMP
AND DISCIPLINES       **** UNDGR AND GRAD ****       FAC RESRCH  *** OTHER ***       TOTAL    PROB                         D    ON   OFF
                   COURSES STDNTS THOUS$ RESRCH      SPON  N-SPON SFT-DV  MISC       *****    SOLV SIMUL   CAT   CAI  CMI  E   CAMP CAMP

ENGINEERING            241   7615   178     8          8     11     13     1          219      23    12     4     4    1  0-    93   93
                                                                                                                        1-     6    6
           INSTL:   28     26    16     2          2      6      2     1           18      23    12     4     4    1  2-     0    1
           INST:    26     26    16     2          2      6      2     1           18      22    11     4     4    1
           (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND       85   2726    41     5          3      8     21     2           80      23    24     3     3    2  0-    47   39
 LIFE SCIENCES                                                                                                          1-     1    8
           INSTL:   42     38    14     1          2      4      2     2           20      23    24     3     3    2  2-     1    3
           INST:    42     38    14     1          2      4      2     2           20      23    24     3     3    2
           (NUMBER REPORTING PER CATEGORY)

COMPUTER               678  15282  2168    17          6     18     14    18         2241      78    32    11    15    9  0-   103   91
 SCIENCES                                                                                                               1-     9   20
           INSTL:  109    104    49     6          2     10      9     4           51      78    32    11    15    9  2-     1    2
           INST:   108    104    49     6          2     10      9     4           51      77    31    11    15    9
           (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND        426  12770   230     8         14     15     15     7          289      90    33     6    21    7  0-   123  110
 STATISTICS                                                                                                             1-     8   18
           INSTL:  126    118    36     3          5     10      5     3           43      90    33     6    21    7  2-     1    4
           INST:   124    117    36     3          5     10      5     3           43      89    32     6    21    7
           (NUMBER REPORTING PER CATEGORY)

PHYSICAL               271   5704    61     2          8     26      3    16          116      49    25    10    14    4  0-    70   66
 SCIENCES                                                                                                               1-     7   10
           INSTL:   73     66    21     2          6     12      3     4           27      49    25    10    14    4  2-     1    3
           INST:    73     66    21     2          6     12      3     4           27      49    25    10    14    4
           (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY              78   1875   126     0          2      7      2     3          140      26     7     5     4    3  0-    42   40
                                                                                                                        1-     4    6
           INSTL:   36     31    11     0          1      6      2     3           19      26     7     5     4    3  2-     0    1
           INST:    36     31    11     0          1      6      2     3           19      26     7     5     4    3
           (NUMBER REPORTING PER CATEGORY)

SOCIAL                 159   2804    68     2          7     13     13     6          109      33    11     5     4    1  0-    55   42
 SCIENCES                                                                                                               1-     2   13
           INSTL:   49     45    18     1          4      8      4     3           26      33    11     5     4    1  2-     2    4
           INST:    49     45    18     1          4      8      4     3           26      33    11     5     4    1
           (NUMBER REPORTING PER CATEGORY)

EDUCATION               19    868     4     0          1      0      4     0            9       5     2     5     5    1  0-    18   15
                                                                                                                        1-     0    2
           INSTL:   11     11     3     0          1      0      2     0            5       5     2     5     5    1  2-     0    1
           INST:    11     11     3     0          1      0      2     0            5       5     2     5     5    1
           (NUMBER REPORTING PER CATEGORY)

BUSINESS AND           221   7671   179     3          1     11     15     2          211      50    29     7     7    1  0-    80   71
 COMMERCE                                                                                                               1-     5   12
           INSTL:   81     77    31     1          1      6      6     2           36      50    29     7     7    1  2-     1    3
           INST:    81     77    31     1          1      6      6     2           36      50    29     7     7    1
           (NUMBER REPORTING PER CATEGORY)

ALL OTHER               97   3905   182    10          0     14     20     3          229      19     6     4     8    3  0-    31   29
                                                                                                                        1-     6    7
           INSTL:   26     29    13     2          0      7      5     2           20      19     6     4     8    3  2-     1    2
           INST:    25     29    13     2          0      7      5     2           20      19     6     4     8    3
           (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTFRS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHFF EDUCATION FOR 1976-77
                CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSCURI-ROLLA
                         UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                  PAGE VIII-08

                                    SUMMARY OF INSTRUCTIONAL ANC RESEARCH USE

   GROUP I         MASTERS:                 I

        TOTAL NUMBER OF INSTITUTIONS               =  717      TOTAL NUMRER OF INSTALLATIONS REPORTED      =  363
        TOTAL NUMBER OF INSTITUTIONS REPORTING =  422      TUTAL NUMRER OF INSTITUTICNS RPTING INSTL  =  314

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT   29:   COLLEGE OR UNIV.   73:   COMMERCIAL    8

                 * INSTALLATION FUNCTION *                               * LOWEST LEVEL OF RECORD KEEPING *
                 NETWORK   NETWORK    LOCAL            NO                 SCHOOL               COURSE    COURSES   INDIVIDUAL
                  ONLY     & LCCAL    CNLY          RECORDS   CAMPUS     OR COL     DEPT     NUMBER    BY SECT    STUDENTS

          INSTL:   14        89        190              83        35         22        70        28        23          34
          INST:    12        89        182              82        34         22        69        28        22          33
          (NUMBER REPORTING PER CATEGCRY)

ACADEMIC FIELDS      TCTL STDNT USE, COURSEWK      USE BY FACULTY AND STAFF      *****    MODE/TYPE CF INSTR USE    C   OTHR COMP
AND DISCIPLINES      **** UNDGR AND GRAD ****      FAC RESRCH  *** OTHER ***     TOTAL    PROB                      D    ON   OFF
                   COURSES STDNTS THOUS$ RESRCH    SPON  A-SPCN SFT-DV  MISC     *****    SOLV SIMUL  CAT  CAI  CMI E   CAMP CAMP

ENGINEERING          756  19480    830     13       15   115     95      1       1069     48    30    5    3    1  0-  101  108
                                                                                                                  1-   22   15
          INSTL:     51     51     29      7        4    11      4      1         31     48    30    5    3    1  2-    2    2
          INST:      49     49     27      6        4    10      4      1         30     47    29    5    3    1
          (NUMBER REPORTING PER CATEGORY)

ENVIRCNMENTAL AND    290   7992    117     41       38    55     11     10        272     54    38   17   14    5  0-   66   60
 LIFE SCIENCES                                                                                                    1-   15   21
          INSTL:     66     62     30      8       13    19      6      3         43     54    38   17   14    5  2-    2    2
          INST:      66     62     30      8       13    19      6      3         43     54    38   17   14    5
          (NUMBER REPORTING PER CATEGORY)

CCMPUTER            1876  58119   3080     67      150   217    255     20       3789    125    68   21   30    8  0-  120  116
 SCIENCES                                                                                                         1-   39   42
          INSTL:    150    143     88     23       11    30     24     11         95    125    68   21   30    8  2-    2    3
          INST:     146    139     87     23       11    30     24     11         93    122    67   21   30    8
          (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND      953  30265   1082     31       46   152     47      8       1366    159    61   18   27    5  0-  148  141
 STATISTICS                                                                                                       1-   38   47
          INSTL:    178    164     95     13        9    27     14      4        104    159    61   18   27    5  2-    4    2
          INST:     175    161     95     13        9    27     13      4        102    156    61   18   27    5
          (NUMBER REPORTING PER CATEGORY)

PHYSICAL             642  19230    360     36       32    86     30     17        567    112    54   19   23   11  0-  105  106
 SCIENCES                                                                                                         1-   30   30
          INSTL:    122    113     58     13       11    26     13      6         71    112    54   19   23   11  2-    3    2
          INST:     118    109     57     13        9    26     13      6         68    109    54   19   23   11
          (NUMBER REPORTING PER CATEGCRY)

PSYCHOLOGY           295  10509    217     32       34    57     37     10        387     80    31   22    9    6  0-   88   89
                                                                                                                  1-   22   21
          INSTL:     92     84     42     13        9    26     12      5         57     80    31   22    9    6  2-    2    2
          INST:      92     84     42     13        9    26     12      5         57     80    31   22    9    6
          (NUMBER REPCRTING PER CATEGCRY)

SOCIAL               517  16341    395     41       38    93     46     14        627     83    42   24   13    5  0-  102   87
 SCIENCES                                                                                                         1-   19   32
          INSTL:    103     97     53     10       11    26     13      4         64     83    42   24   13    5  2-    1    3
          INST:     102     96     53     10       10    26     12      4         62     81    42   24   13    5
          (NUMBER REPORTING PER CATEGORY)

EDUCATION            282   9200    109     36       13    44     16      9        227     55    26   17   19    7  0-   66   62
                                                                                                                  1-   14   18
          INSTL:     68     66     37     14        5    19      7      5         49     55    26   17   19    7  2-    2    2
          INST:      67     65     37     13        5    19      7      5         46     54    26   17   19    7
          (NUMBER REPCRTING PER CATEGORY)

BUSINESS AND        1359  69706   1230     83       35    81     35     22       1486    131    93   18   20    9  0-  134  124
 COMMERCE                                                                                                         1-   24   32
          INSTL:    152    149     87     14        7    25     20      8         92    131    93   18   20    9  2-    5    7
          INST:     150    146     86     14        7    25     20      8         90    128    92   18   20    9
          (NUMBER REPORTING PER CATEGORY)

ALL OTHER            332   9531    335     68       74    51     40     66        634     44    18   20   17    5  0-   61   59
                                                                                                                  1-   16   18
          INSTL:     60     57     32     16        8    19      9      9         53     44    18   20   17    5  2-    3    3
          INST:      60     57     32     16        8    19      9      9         53     44    18   20   17    5
          (NUMBER REPORTING PER CATEGORY)
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                                SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

     GROUP I        DOCTORATE:           I

          TOTAL NUMBER OF INSTITUTIONS              =  422      TOTAL NUMBER OF INSTALLATIONS REPORTED      =  495
          TOTAL NUMBER OF INSTITUTIONS REPORTING =  284      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =  220

 USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT   28;   COLLEGE OR UNIV.   42;   COMMERCIAL    5

                    * INSTALLATION FUNCTION *                                    * LOWEST LEVEL OF RECORD KEEPING *
                    NETWORK   NETWORK   LOCAL                      NO                 SCHOOL             COURSE     COURSES    INDIVIDUAL
                     ONLY     & LOCAL   ONLY                     RECORDS    CAMPUS    OR COL     DEPT     NUMBER     BY SECT    STUDENTS

           INSTL:     15        116      213                        93         12        20        90        37         26          63
           INST:      14         92      128                        53         12        20        73        33         26          54
           (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS      TOTL STDNT USE, COURSEWK     USE BY FACULTY AND STAFF       *****    MODE/TYPE OF INSTR USE    C   OTHR COMP
 AND DISCIPLINES     **** UNDGR AND GRAD ****     FAC RESRCH  *** OTHER ***      TOTAL    PROB                      D    ON   OFF
                   COURSES STDNTS THOUS$ RESRCH   SPON  N-SPON SFT-DV  MISC      *****    SOLV SIMUL  CAT  CAI  CMI E    CAMP CAMP

ENGINEERING          6061 149956  11952   3492    5499   4254    228    444     25869     111    85   17   26    7 0-   137  180
                                                                                                                  1-    84   32
           INSTL:     116    111     98     62      81     81     22     13       118     111    85   17   26    7 2-     4   14
           INST:       93     90     87     55      65     73     19     13        94      87    72   16   23    7
           (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND    1770  50759   1562   1217    3900   3712    533    221     12145     105    59   26   33    8 0-    91  113
 LIFE SCIENCES                                                                                                    1-    57   33
           INSTL:     116    110     99     60      88     94     28     12       129     105    59   26   33    8 2-    10   12
           INST:      101     94     93     57      72     86     26     12       107      89    50   26   28    8
           (NUMBER REPORTING PER CATEGORY)

COMPUTER             3807 153098   8107    777     631   1480    288    163     11446     113    70   21   28   10 0-    74  118
 SCIENCES                                                                                                         1-    72   23
           INSTL:     132    121    107     53      46     73     23     12       115     113    70   21   28   10 2-     2    8
           INST:      118    110     97     48      41     71     22     11       101     100    67   21   28   10
           (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND      1957  64874   2387    225    1101   1462    157    142      5474     114    52   23   25    6 0-   123  132
 STATISTICS                                                                                                       1-    32   18
           INSTL:     136    124    112     49      52     81     17      6       125     114    52   23   25    6 2-     2    7
           INST:      125    116    107     48      49     78     15      6       116     107    49   23   23    6
           (NUMBER REPORTING PER CATEGORY)

PHYSICAL             1349  49862   2410   7020    6994  16556    433    530     33943     118    65   25   31    8 0-    96  117
 SCIENCES                                                                                                         1-    70   44
           INSTL:     134    127    108     72      88    100     24     14       138     118    65   25   31    8 2-     4    9
           INST:      119    110    101     63      70     89     21     14       115     105    61   25   30    8
           (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY            896  26776    630    382     361    900     44     34      2351      85    33   21   16    6 0-    80  101
                                                                                                                  1-    44   14
           INSTL:      93     86     75     49      39     71     13      8       100      85    33   21   16    6 2-     1   10
           INST:       91     84     73     48      37     69     13      8        94      82    32   20   15    6
           (NUMBER REPORTING PER CATEGORY)

SOCIAL               2285  57970   1737    904    1370   2946    174    183      7314      94    41   14   21    3 0-   106  105
 SCIENCES                                                                                                         1-    20   17
           INSTL:     110    100     93     48      60     80     13      7       110      94    41   14   21    3 2-     8   12
           INST:      104     96     89     47      55     78     12      7       102      90    38   14   21    3
           (NUMBER REPORTING PER CATEGORY)

EDUCATION             767  20944    598    469     497    871     62     33      2530      78    23   18   18    5 0-    96   92
                                                                                                                  1-    13   13
           INSTL:      98     78     73     37      41     55      9      8        90      78    23   18   18    5 2-     5    9
           INST:       87     77     72     37      41     55      9      8        89      77    23   18   17    5
           (NUMBER REPORTING PER CATEGORY)

BUSINESS AND         3095 157904  12828   1999     692   4373    392    742     21026      95    80   18   27   11 0-   105  111
 COMMERCE                                                                                                         1-    26   15
           INSTL:     114    105    107     53      47     88     14     17       110      95    80   18   27   11 2-     4    9
           INST:      108    101    101     51      46     85     14     16       103      92    77   18   26   10
           (NUMBER REPORTING PER CATEGORY)

ALL OTHER            1946  58197   2759   1547    4079   5403    641   2506     16935      74    30   17   24    8 0-    87   90
                                                                                                                  1-    30   24
           INSTL:      82     78     76     42      52     76     21     21       112      74    30   17   24    8 2-    11   14
           INST:       77     73     73     40      49     72     20     21       102      68    30   17   23    8
           (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                       SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

   GROUP (                       BELOW 500  )

        TOTAL NUMBER OF INSTITUTIONS              =  662      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   79
        TOTAL NUMBER OF INSTITUTIONS REPORTING =  392      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =   76

 USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT     1:    COLLEGE OR UNIV.     6:    COMMERCIAL     6

                 * INSTALLATION FUNCTION *                                    * LOWEST LEVEL OF RECORD KEEPING *
                 NETWORK   NETWORK    LOCAL                     NO                     SCHOOL                  COURSE     COURSES    INDIVIDUAL
                  ONLY     & LOCAL     ONLY                  RECORDS      CAMPUS      OR COL        DEPT      NUMBER     BY SECT     STUDENTS

           INSTL:    3          3        39                       24           3           1           6          3           0            5
           INST:     3          3        39                       24           3           1           6          3           0            5
           (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS        TOTL STDNT USE, COURSEWK        USE BY FACULTY AND STAFF        *****     MODE/TYPE OF INSTR USE       C    OTHR COMP
AND DISCIPLINES        **** UNDGR AND GRAD ****        FAC RESRCH  *** OTHER ***       TOTAL     PROB                         D     ON    OFF
                   COURSES STDNTS THOUS$ RESRCH        SPON  N-SPON SFT-DV  MISC       *****     SOLV SIMUL  CAT  CAI  CMI    E    CAMP  CAMP

ENGINEERING            26    498     24     30       .  0      10      9      1          74        6     4    1    2    0  0-     22    20
                                                                                                                           1-      0     2
           INSTL:       7      7      6      1          0       1      2      1           6        6     4    1    2    0  2-      0     0
           INST:        7      7      6      1          0       1      2      1           6        6     4    1    2    0
           (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND      24    180     22     30         53      18     23      0         146        4     2    1    0    0  0-      5     4
 LIFE SCIENCES                                                                                                             1-      1     2
           INSTL:       3      3      2      1          2       3      2      0           4        4     2    1    0    0  2-      0     0
           INST:        3      3      2      1          2       3      2      0           4        4     2    1    0    0
           (NUMBER REPORTING PER CATEGORY)

COMPUTER               66   1160     65     15          0       4      9      4          97       13     5    1    1    0  0-     16    14
 SCIENCES                                                                                                                  1-      0     2
           INSTL:      16     16     12      1          0       3      3      1          12       13     5    1    1    0  2-      0     0
           INST:       16     16     12      1          0       3      3      1          12       13     5    1    1    0
           (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND        39    756=    18      9          5      12      8      1          53       12     7    3    3    0  0-     12    11
 STATISTICS                                                                                                                1-      1     2
           INSTL:      13     13      8      3          2       3      2      1           8       12     7    3    3    0  2-      0     0
           INST:       13     13      8      3          2       3      2      1           8       12     7    3    3    0
           (NUMBER REPORTING PER CATEGORY)

PHYSICAL               23    228     10     36          9       7      4      0          66        8     7    2    2    0  0-      8     7
 SCIENCES                                                                                                                  1-      1     2
           INSTL:       8      8      5      2          2       2      1      0           5        8     7    2    2    0  2-      0     0
           INST:        8      8      5      2          2       2      1      0           5        8     7    2    2    0
           (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY              6    412     13      4          6       3     12      1          39        2     1    1    1    0  0-      3     3
                                                                                                                           1-      1     1
           INSTL:       3      3      3      2          2       3      2      1           4        2     1    1    1    0  2-      0     0
           INST:        3      3      3      2          2       3      2      1           4        2     1    1    1    0
           (NUMBER REPORTING PER CATEGORY)

SOCIAL                  8    300      0      0          0       0      0      0           0        0     1    1    1    0  0-      3     2
 SCIENCES                                                                                                                  1-      0     1
           INSTL:       2      2      0      0          0       0      0      0           0        0     1    1    1    0  2-      0     0
           INST:        2      2      0      0          0       0      0      0           0        0     1    1    1    0
           (NUMBER REPORTING PER CATEGORY)

EDUCATION               8    817      3      0          0       0      3      0           6        1     1    1    2    0  0-      3     3
                                                                                                                           1-      0     0
           INSTL:       2      3      1      0          0       0      1      0           1        1     1    1    2    0  2-      0     0
           INST:        2      3      1      0          0       0      1      0           1        1     1    1    2    0
           (NUMBER REPORTING PER CATEGORY)

BUSINESS AND           22    494      7      0          0       0      1      0           8        6     6    1    0    0  0-     10     9
 COMMERCE                                                                                                                  1-      0     1
           INSTL:       9      9      7      0          0       0      1      0           7        6     6    1    0    0  2-      0     0
           INST:        9      9      7      0          0       0      1      0           7        6     6    1    0    0
           (NUMBER REPORTING PER CATEGORY)

ALL OTHER               8    165      1      1          0       0      0      6           8        2     0    1    2    0  0-      4     4
                                                                                                                           1-      0     0
           INSTL:       3      3      1      1          0       0      0      2           2        2     0    1    2    0  2-      0     0
           INST:        3      3      1      1          0       0      0      2           2        2     0    1    2    0
           (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATIUN FOR 1976-77
                CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA                           PAGE VIII-11
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                         SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

   GROUP (                      500-2499    )

        TOTAL NUMBER OF INSTITUTIONS              = 1382     TOTAL NUMBER OF INSTALLATICNS REPORTEC      =  604
        TOTAL NUMBER OF INSTITUTIONS REPCRTING =   779     TOTAL NUMBER OF INSTITUTIONS RPTING INSTL   =  559

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NCN PROFIT    41:    CCLLEGE OR UNIV.    94:    COMMERCIAL    22

                  * INSTALLATION FUNCTION *                                  * LOWEST LEVEL UF RECCRC KEEPING *
                  NETWORK   NETWORK    LOCAL                 NO                  SCHOOL                 COURSE     COURSES    INDIVIDUAL
                   ONLY     & LOCAL     ONLY               RECORDS    CAMPUS     OR CCL       DEPT      NUMBER     BY SECT     STUDENTS

           INSTL:    33        68        343                  186        33         48          85         28          21          40
           INST:     32        68        330                  181        33         47          85         28          20          40
           (NUMBER REPCRTING PER CATEGORY)

ACADEMIC FIELDS       TOTL STDNT USE, COURSEWK       USE BY FACULTY AND STAFF       *****      MODE/TYPE CF INSTR USE        C    OTHR COMP
AND DISCIPLINES       **** UNDGR AND GRAD ****       FAC RESRCH  *** OTHER ***      TOTAL      PROB                          D     ON    OFF
                  COURSES STDNTS THOUS$ RESRCH       SPON   N-SPON  SFT-DV  MISC    *****      SOLV  SIMUL  CAT   CAI   CMI  E    CAMP  CAMP

ENGINEERING          330    8257    314      21       118     98     17      4       572       52    21     5     6     2  0-    184   182
                                                                                                                        1-     12    13
           INSTL:    61      60      27       5         5     11      4      2        34       52    21     5     6     2  2-      0     2
           INST:     60      60      27       5         5     11      4      2        34       52    21     5     6     2
           (NUMBER PEPORTING PER CATEGORY)

ENVIRONMENTAL AND    294    6938    250      35       134     89     41      3       552       44    41    10    13     5  0-     73    66
 LIFE SCIENCES                                                                                                          1-     11    16
           INSTL:    75      67      23       6        15     13      7      3        35       44    41    10    13     5  2-      2     5
           INST:     75      67      23       6        15     13      7      3        35       44    41    10    13     5
           (NUMBER REPORTING PER CATEGORY)

COMPUTER            1624   24905   3164      33        31     46     40     29      3343      142    47    18    29    15  0-    189   174
 SCIENCES                                                                                                               1-     19    31
           INSTL:   203     191      94      11         2     19     17      9       100      142    47    18    29    15  2-      1     4
           INST:    202     190      93      11         2     19     17      9        98      141    47    18    29    15
           (NUMBER REPORTING PER CATFGORY)

MATHEMATICS AND      683   15978    740      23       138     79     30      9      1019      148    52    11    32     9  0-    185   171
 STATISTICS                                                                                                             1-     20    29
           INSTL:   195     178      70      10        11     19     10      4        81      148    52    11    32     9  2-      1     6
           INST:    193     176      70      10        11     19      9      4        79      147    52    11    32     9
           (NUMBER REPORTING PER CATEGORY)

PHYSICAL             468    7170     96      79       232    166      3     18       594       79    43    11    20     8  0-    106   101
 SCIENCES                                                                                                               1-     18    21
           INSTL:   114     100      29       8        14     15      3      5        41       79    43    11    20     8  2-      1     4
           INST:    112      98      28       8        12     15      3      5        38       78    43    11    20     8
           (NUMBER REPORTING PER CATEGORY)

PSYCHCLOGY           135    2611    143       1         3     15      3      3       168       44    13     5     5     4  0-     66    65
                                                                                                                        1-      9     9
           INSTL:    59      50      15       1         2     10      3      3        28       44    13     5     5     4  2-      0     2
           INST:     59      50      15       1         2     10      3      3        28       44    13     5     5     4
           (NUMBER REPORTING PER CATFGORY)

SOCIAL               285    4680    124      11        16     22     26      6       205       54    22     7     6     3  0-     82    68
 SCIENCES                                                                                                               1-      8    19
           INSTL:    80      69      27       5         9     11      8      3        39       54    22     7     6     3  2-      2     5
           INST:     80      69      27       5         8     11      7      3        37       53    22     7     6     3
           (NUMBER REPORTING PER CATEGORY)

EDUCATION             66    2081     42       7         9      1      3      0        62       13     5     8     5     1  0-     30    26
                                                                                                                        1-      3     4
           INSTL:    26      25       8       4         4      1      1      0        14       13     5     8     5     1  2-      0     3
           INST:     26      25       8       4         4      1      1      0        14       13     5     8     5     1
           (NUMBER REPORTING PEP CATEGCRY)

BUSINESS AND         475   12441    319       5        52     58    216      1       651       91    55     7    12     3  0-    134   123
 COMMERCE                                                                                                               1-      9    17
           INSTL:   140     129      55       3         3      6      8      1        60       91    55     7    12     3  2-      3     6
           INST:    140     129      55       3         3      6      8      1        59       90    54     7    12     3
           (NUMBER REPORTING PER CATEGCRY)

ALL OTHER            181    4305    173      21       358     52     17     89       710       40    12     9     9     5  0-     57    55
                                                                                                                        1-      9    10
           INSTL:    49      52      22       4         7     12      9      4        38       40    12     9     9     5  2-      2     3
           INST:     48      52      22       4         7     12      9      4        38       40    12     9     9     5
           (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                  CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                         UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                 SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

   GROUP (               2500-9999  )

      TOTAL NUMBER OF INSTITUTIONS              =  775      TOTAL NUMBER OF INSTALLATIONS REPORTED      =  486
      TOTAL NUMBER OF INSTITUTIONS REPORTING =  443      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =  420

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT   31;   COLLEGE OR UNIV.   82;   COMMERCIAL   11

                  * INSTALLATION FUNCTION *                                        * LOWEST LEVEL OF RECORD KEEPING *
                NETWORK   NETWORK     LOCAL                   NO                 SCHOOL              COURSE    COURSES    INDIVIDUAL
                 ONLY     & LOCAL     ONLY                  RECORDS   CAMPUS     OR CCL     DEPT     NUMBER    BY SECT     STUDENTS

          INSTL:   18        117        261                   101       38         38        88        41         29          61
          INST:    16        117        245                    98       37         37        88        41         29          61
          (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS      TOTL STDNT USE, COURSEWK        USE BY FACULTY AND STAFF        *****      MODE/TYPE OF INSTR USE       C   OTHR COMP
AND DISCIPLINES      **** UNDGR AND GRAD ****        FAC RESRCH  *** OTHER ***       TOTAL      PROB                         O    ON    OFF
                  COURSES STDNTS THOUS$ RESRCH       SPON  N-SPON SFT-DV  MISC       *****      SOLV SIMUL  CAT   CAI   CMI  E   CAMP  CAMP

ENGINEERING          1742  45378   2477    369        837   1004    113      3        4803       109    55    8    15     0  0-   160   177
                                                                                                                             1-    50    30
          INSTL:  115    110     73     16             23     30     10      3          79       109    55    8    15     0  2-     4     7
          INST:   111    108     73     16             22     29      9      3          77       106    52    8    15     0
          (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND     550  15300    343     81        519    427     37      8        1415        59    39   23    19     9  0-    76    77
 LIFE SCIENCES                                                                                                               1-    23    18
          INSTL:   76     74     62     11             22     34      8      2          71        59    39   23    19     9  2-     2     6
          INST:    76     74     62     11             22     34      8      2          71        59    39   23    19     9
          (NUMBER REPORTING PER CATEGORY)

COMPUTER             3117 106112   5892    163         83    276    153     33        6600       191    84   30    45    18  0-   184   185
 SCIENCES                                                                                                                    1-    57    56
          INSTL:  224    216    142     26             19     46     31     13         148       191    84   30    45    18  2-     2     3
          INST:   222    215    141     25             19     46     31     13         147       189    83   30    45    18
          (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND      1052  33311    862     65         44    221     33      4        1229       174    59   17    33     5  0-   183   173
 STATISTICS                                                                                                                  1-    37    46
          INSTL:  200    185    112     12             16     40     11      1         125       174    59   17    33     5  2-     3     4
          INST:   197    183    112     12             16     40     11      1         125       171    58   17    33     5
          (NUMBER REPORTING PER CATEGORY)

PHYSICAL              730  19697    834    145        466   1413     34     13        2905       121    51   23    29     9  0-   116   114
 SCIENCES                                                                                                                    1-    35    34
          INSTL:  130    124     82     14             24     44     14      4          94       121    51   23    29     9  2-     3     6
          INST:   129    123     82     14             24     44     14      4          94       120    51   23    29     9
          (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY            352   9006    280     29         53    167     28      6         563        81    25   25    12     6  0-    94    94
                                                                                                                             1-    23    20
          INSTL:   87     83     50     11             11     37     11      2          69        81    25   25    12     6  2-     2     5
          INST:    87     83     50     11             11     37     11      2          69        81    25   25    12     6
          (NUMBER REPORTING PER CATEGORY)

SOCIAL                640  16029    512     18        147    337     33     12        1059        89    42   25    20     5  0-   116    96
 SCIENCES                                                                                                                    1-    13    30
          INSTL:  102    101     66     10             21     40      7      3          80        89    42   25    20     5  2-     3     6
          INST:   101    100     66     10             21     40      7      3          80        88    42   25    20     5
          (NUMBER REPORTING PER CATEGORY)

EDUCATION             250   5692    127     20         17     68     14      7         253        55    21   14    17     7  0-    74    69
                                                                                                                             1-     9    12
          INSTL:   62     58     41     10              8     21      6      4          53        55    21   14    17     7  2-     2     4
          INST:    62     58     41     10              8     21      6      4          53        55    21   14    17     7
          (NUMBER REPORTING PER CATEGORY)

BUSINESS AND         1728  72223  10674   1183        248   2571     36    344       15056       171   110   29    37    14  0-   189   171
 COMMERCE                                                                                                                    1-    30    45
          INSTL:  206    199    124     19             13     45     19     12         131       171   110   29    37    14  2-     5     8
          INST:   205    197    124     19             13     45     19     12         131       170   110   29    37    14
          (NUMBER REPORTING PER CATEGORY)

ALL OTHER             500  18816   1424    201        266    436    155    888        3370        53    24   20    22     9  0-    88    81
                                                                                                                             1-    17    22
          INSTL:   69     66     50     18             13     32     12     10          78        53    24   20    22     9  2-     3     5
          INST:    69     66     50     18             13     31     12     10          77        53    24   20    22     9
          (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
              CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA                          PAGE VIII-13
                         UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                               SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

   GROUP (                   10000-19999)

        TOTAL NUMBER OF INSTITUTIONS           =  205      TOTAL NUMBER OF INSTALLATIONS REPORTED      =  189
        TOTAL NUMBER OF INSTITUTIONS REPORTING =  131      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL   =  121

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:  COOP. OR NON PROFIT   26:   COLLEGE OR UNIV.   15:   COMMERCIAL    3

                    * INSTALLATION FUNCTION *                          * LOWEST LEVEL OF RECORD KEEPING *
                   NETWORK   NETWORK    LOCAL              NO                 SCHOOL              COURSE     COURSES    INDIVIDUAL
                    ONLY     & LOCAL    ONLY             RECORDS   CAMPUS     OR COL     DEPT     NUMBER     BY SECT     STUDENTS

           INSTL:     7         52        88                41        12         5         44        10         10          19
           INST:      7         50        67                32        12         5         38        10         10          18
           (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS      TOTL STDNT USE, COURSEWK       USE BY FACULTY AND STAFF       *****     MODE/TYPE OF INSTR USE      C   OTHR COMP
AND DISCIPLINES      **** UNDGR AND GRAD ****       FAC RESRCH  *** OTHER ***      TOTAL    PROB                         D    ON   OFF
                  COURSES STDNTS THOUS$ RESRCH      SPON  N-SPON SFT-DV  MISC      *****    SOLV SIMUL  CAT  CAI  CMI    E   CAMP CAMP

ENGINEERING          1614  37653   1518    427       909    750     47    136       3787     41    28    3    4    1  0-    69   88
                                                                                                                     1-    32   11
           INSTL:      47     44     34     20        22     27      9      5         40     41    28    3    4    1  2-     0    2
           INST:       42     39     31     17        19     24      9      5         35     36    25    3    4    1
           (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND     521  14931    516    278       603    596    147     26       2166     47    23   12   14    0  0-    45   51
 LIFE SCIENCES                                                                                                       1-    19   13
           INSTL:      55     51     42     28        25     35     11      5         51     47    23   12   14    0  2-     3    3
           INST:       49     46     40     27        23     32     10      5         47     41    21   12   12    0
           (NUMBER REPORTING PER CATEGORY)

COMPUTER             1962  64060   3761    236       280    620    304     18       5219     63    39   13   18    4  0-    40   58
 SCIENCES                                                                                                            1-    39   20
           INSTL:      79     75     58     26        18     31     19      7         61     63    39   13   18    4  2-     2    3
           INST:       70     67     54     23        16     29     18      6         56     57    36   13   18    4
           (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND       806  31386   1059     69       137    275     38    136       1705     58    26   12   12    2  0-    63   65
 STATISTICS                                                                                                          1-    14   13
           INSTL:      73     65     57     19        16     34     11      6         61     58    26   12   12    2  2-     3    2
           INST:       71     64     56     19        16     33     10      6         59     57    25   12   12    2
           (NUMBER REPORTING PER CATEGORY)

PHYSICAL              630  19639    938    935       973   2178     44     21       5089     58    30   10   12    5  0-    49   60
 SCIENCES                                                                                                            1-    27   15
           INSTL:      70     67     52     29        26     39     13      7         60     58    30   10   12    5  2-     1    2
           INST:       66     60     49     26        23     37     12      7         54     55    28   10   12    5
           (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY            336  11003    224     89        77    175     21     15        601     45    21   15    7    1  0-    42   50
                                                                                                                     1-    18    9
           INSTL:      50     45     36     26        10     28      9      9         47     45    21   15    7    1  2-     0    1
           INST:       49     44     35     25        10     27      9      9         46     44    20   15    6    1
           (NUMBER REPORTING PER CATEGORY)

SOCIAL                790  20938    591    173       145    551     43     12       1515     45    18    9    9    1  0-    56   55
 SCIENCES                                                                                                            1-     8    8
           INSTL:      59     54     44     21        17     36     13      6         52     45    18    9    9    1  2-     1    2
           INST:       58     53     44     21        17     36     12      6         51     45    17    9    9    1
           (NUMBER REPORTING PER CATEGORY)

EDUCATION             336   8598    177     79        38    142      7     16        459     40    14    7    8    1  0-    46   43
                                                                                                                     1-     8   10
           INSTL:      47     42     33     15        10     25      6      5         41     40    14    7    8    1  2-     0    1
           INST:       46     41     33     14        10     25      6      5         40     39    14    7    8    1
           (NUMBER REPORTING PER CATEGORY)

BUSINESS AND         1328  60445   1438    161       144    389     28    128       2288     52    41    8   12    4  0-    56   57
 COMMERCE                                                                                                            1-    15   13
           INSTL:      64     61     48     18        14     34     10      9         50     52    41    8   12    4  2-     1    2
           INST:       63     60     47     18        14     34     10      9         49     51    41    8   12    4
           (NUMBER REPORTING PER CATEGORY)

ALL OTHER             626  20107   1181    163       969   1586    197    946       5042     36    17   12   13    3  0-    43   46
                                                                                                                     1-    13   12
           INSTL:      44     41     36     18        19     30     11     13         50     36    17   12   13    3  2-     5    3
           INST:       43     38     35     17        19     30     11     13         48     35    17   12   13    3
           (NUMBER REPORTING PER CATEGORY)
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                                   SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

     GROUP 1                   ABOVE 20000)

          TOTAL NUMBER OF INSTITUTIONS              =  112      TOTAL NUMBER OF INSTALLATIONS REPORTED        =  241
          TOTAL NUMBER OF INSTITUTIONS REPORTING =   77      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL   =   72

   USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT     7;   COLLEGE OR UNIV.   23;   COMMERCIAL     0

                     * INSTALLATION FUNCTION *                                   * LOWEST LEVEL OF RECORD KEEPING *
                    NETWORK   NETWORK    LOCAL                   NO                SCHOOL                 COURSE     COURSES    INDIVIDUAL
                     ONLY     & LOCAL    ONLY                 RECORDS   CAMPUS     OR COL      DEPT      NUMBER     BY SECT     STUDENTS

              INSTL:    7        65        87                     48        5          8         37         17          11           29
              INST:     6        43        36                     20        5          8         25         13          11           20
              (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS        TOTL STDNT USE, COURSEWK       USE BY FACULTY AND STAFF         *****     MODE/TYPE OF INSTR USE      C   OTHR COMP
 AND DISCIPLINES       **** UNDGR AND GRAD ****       FAC RESRCH  *** OTHER ***        TOTAL     PROB                         D    CN   OFF
                  COURSES STDNTS THOUS$ RESRCH        SPON  N-SPON SFT-DV  MISC        *****     SOLV SIMUL  CAT  CAI  CMI   E   CAMP CAMP

ENGINEERING          3644  96091   8977   2668        3661   2527   162    306        18301      56   43   13   19    7  0-    70   89
                                                                                                                       1-    37   14
              INSTL:   58     56     46     31          38     34     9      6           56      56   43   13   19    7  2-     3    8
              INST:    41     40     37     26          26     29     7      6           38      38   34   12   16    7
              (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND    1019  32476    668    839        2638   2647   340    198         7930      41   28   13   15    5  0-    39   46
 LIFE SCIENCES                                                                                                         1-    22   16
              INSTL:   44     45     35     23          40     33    11      8           54      41   28   13   15    5  2-     7    6
              INST:    35     34     31     21          26     28    10      8           36      31   21   13   12    5
              (NUMBER REPORTING PER CATEGORY)

COMPUTER             1882  96684   4319    462         394    829   152    134         6290      43   28   10   12    6  0-    25   46
 SCIENCES                                                                                                              1-    33    8
              INSTL:   48     46     39     23          21     28     7      4           44      43   28   10   12    6  2-     1    5
              INST:    41     41     34     22          18     28     7      4           36      35   27   10   12    6
              (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND      1136  43714   2083    149         839   1061   121      9         4262      43   21   14   15    4  0-    42   48
 STATISTICS                                                                                                            1-    15    6
              INSTL:   51     50     40     23          22     31     7      2           45      43   21   14   15    4  2-     1    4
              INST:    42     43     36     22          19     29     6      2           38      37   19   14   13    4
              (NUMBER REPORTING PER CATEGORY)

PHYSICAL              567  37319   1260   5863        5354  12907   389    513        26286      46   30   18   18    5  0-    34   46
 SCIENCES                                                                                                              1-    33   20
              INSTL:   49     48     40     34          39     40    13      9           57      46   30   18   18    5  2-     3    4
              INST:    37     37     36     28          24     31    11      9           40      35   28   18   17    5
              (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY            496  23873    333    292         258    618    20     24         1545      32   16   12    8    5  0-    31   39
                                                                                                                       1-    20    6
              INSTL:   39     36     31     23          24     31     3      2           41      32   16   12    8    5  2-     1    7
              INST:    38     35     30     23          22     30     3      2           36      30   16   11    8    5
              (NUMBER REPORTING PER CATEGORY)

SOCIAL               1367  43674   1037    745        1109   2147   144    176         5358      33   19    9    8    3  0-    33   35
 SCIENCES                                                                                                              1-    12    7
              INSTL:   39     35     37     23          29     30     5      4           43      33   19    9    8    3  2-     6    9
              INST:    34     32     33     22          24     28     5      4           36      29   17    9    8    3
              (NUMBER REPORTING PER CATEGORY)

EDUCATION             428  14104    394    399         447    704    55     19         2018      30   11   12   11    4  0-    33   31
                                                                                                                       1-     7    7
              INSTL:   33     30     33     22          25     27     4      4           38      30   11   12   11    4  2-     5    7
              INST:    32     29     32     22          25     27     4      4           37      29   11   12   10    4
              (NUMBER REPORTING PER CATEGORY)

BUSINESS AND         1767 113400   2383    741         284   1448   171    304         5331      39   31    9   13    6  0-    42   48
 COMMERCE                                                                                                              1-    14    6
              INSTL:   47     46     46     30          25     35     5      7           47      39   31    9   13    6  2-     2    4
              INST:    41     42     40     28          24     32     5      6           40      36   28    9   12    5
              (NUMBER REPORTING PER CATEGORY)

ALL OTHER            1322  42877   1328   1280        2576   3406   341    656         9587      30   16    9   17    6  0-    32   36
                                                                                                                       1-    17    9
              INSTL:   38     37     33     21          23     32     9      7           44      30   16    9   17    6  2-     5    9
              INST:    34     35     31     20          20     29     8      7           37      25   16    9   16    6
              (NUMBER REPORTING PER CATEGORY)
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                                  SUMMARY OF INSTRUCTICNAL ANC RESEARCH USE

   GROUP (PUBLIC: ASSOCIATE:BELOW 500  )

         TOTAL NUMBER OF INSTITUTIONS             =   52       TOTAL NUMBER OF INSTALLATICNS REPORTED      =   9
         TOTAL NUMBER OF INSTITUTICNS REPORTING =   28       TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =   9

 USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT    0:   CCLLEGE OR UNIV.    4:   COMMERCIAL    0

                  * INSTALLATION FUNCTION *                                    * LOWEST LEVEL OF RECORD KEEPING *
                  NETWORK   NETWORK   LOCAL                    NC                 SCHOOL              COURSE    COURSES   INDIVIDUAL
                   ONLY     & LOCAL   ONLY                  RECORDS   CAMPUS    OR COL     DEPT     NUMBER    BY SECT    STUDENTS

           INSTL:    0         1        4                        3         0        1         0         0         0          1
           INST:     0         1        4                        3         0        1         0         0         0          1
           (NUMBER REPORTING PER CATEGCRY)

ACADEMIC FIELDS      TOTL STDNT USE, COURSEWK       USE BY FACULTY AND STAFF       *****    MODE/TYPE OF INSTR USE     C   OTHR COMP
 AND DISCIPLINES     **** UNDGR AND GRAD ****       FAC RESRCH  *** OTHER ***      TOTAL    PROB                       D    ON   OFF
                   COURSES STDNTS THOUS$ RESRCH     SPON  N-SPON SFT-DV  MISC      *****    SOLV SIMUL  CAT  CAI  CMI  E   CAMP CAMP

 ENGINEERING            6    154     4      0         0      0      0      0          4       1     1    0    0    0  0-     2    2
                                                                                                                    1-     0    0
           INSTL:       1      1     1      0         0      0      0      0          1       1     1    0    0    0  2-     0    0
           INST:        1      1     1      0         0      0      0      0          1       1     1    0    0    0
           (NUMBER REPORTING PER CATEGORY)

 ENVIRONMENTAL AND      2     50     2      0         0      C      0      0          2       0     1    0    0    0  0-     1    1
  LIFE SCIENCES                                                                                                     1-     0    0
           INSTL:       1      1     1      0         0      0      0      0          1       0     1    0    0    0  2-     0    0
           INST:        1      1     1      0         0      0      0      0          1       0     1    0    0    0
           (NUMBER REPORTING PER CATEGORY)

 COMPUTER              20    331    34      0         0      1      1      0         36       3     2    1    0    0  0-     3    3
  SCIENCES                                                                                                          1-     0    0
           INSTL:       3      3     3      0         0      1      1      0          3       3     2    1    0    0  2-     0    0
           INST:        3      3     3      0         0      1      1      0          3       3     2    1    0    0
           (NUMBER REPORTING PER CATEGORY)

 MATHEMATICS AND        9    112     3      0         0      0      0      0          3       2     2    1    1    0  0-     2    2
  STATISTICS                                                                                                        1-     0    0
           INSTL:       2      2     2      0         0      0      0      0          2       2     2    1    1    0  2-     0    0
           INST:        2      2     2      0         0      0      0      0          2       2     2    1    1    0
           (NUMBER REPORTING PER CATEGORY)

 PHYSICAL               4    110     2      0         0      0      0      0          2       1     2    1    0    0  0-     2    2
  SCIENCES                                                                                                          1-     0    0
           INSTL:       2      2     2      0         0      0      0      0          2       1     2    1    0    0  2-     0    0
           INST:        2      2     2      0         0      0      0      0          2       1     2    1    0    0
           (NUMBER REPORTING PER CATEGORY)

 PSYCHOLOGY             3    300     1      0         0      0      0      0          1       0     0    1    0    0  0-     1    1
                                                                                                                    1-     0    0
           INSTL:       1      1     1      0         0      0      0      0          1       0     0    1    0    0  2-     0    0
           INST:        1      1     1      0         0      0      0      0          1       0     0    1    0    0
           (NUMBER REPORTING PER CATEGORY)

 SOCIAL                 5    200     0      0         0      0      0      0          0       0     1    1    0    0  0-     1    1
  SCIENCES                                                                                                          1-     0    0
           INSTL:       1      1     0      0         0      0      0      0          0       0     1    1    0    0  2-     0    0
           INST:        1      1     0      0         0      0      0      0          0       0     1    1    0    0
           (NUMBER REPORTING PER CATEGORY)

 EDUCATICN              0      0     0      0         0      0      0      0          0       0     0    0    0    0  0-     0    0
                                                                                                                    1-     0    0
           INSTL:       0      0     0      0         0      0      0      0          0       0     0    0    0    0  2-     0    0
           INST:        0      0     0      0         0      0      0      0          0       0     0    0    0    0
           (NUMBER REPORTING PER CATEGORY)

 BUSINESS AND          14    380     3      0         0      0      0      0          3       2     3    1    0    0  0-     4    4
  COMMERCE                                                                                                          1-     0    0
           INSTL:       4      4     3      0         0      0      0      0          3       2     3    1    0    0  2-     0    0
           INST:        4      4     3      0         0      0      0      0          3       2     3    1    0    0
           (NUMBER REPORTING PER CATEGORY)

 ALL CTHER              5    100     0      0         0      0      0      5          5       1     0    0    0    0  0-     2    2
                                                                                                                    1-     0    0
           INSTL:       1      1     0      0         0      0      0      1          1       1     0    0    0    0  2-     0    0
           INST:        1      1     0      0         0      0      0      1          1       1     0    0    0    0
           (NUMBER REPORTING PER CATEGCRY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                      UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                         SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

   GROUP (PUBLIC: ASSOCIATE:500-2499    )

        TOTAL NUMBER OF INSTITUTIONS             =  448     TOTAL NUMBER OF INSTALLATIONS REPORTED      =  172
        TOTAL NUMBER OF INSTITUTIONS REPORTING =  249     TOTAL NUMBER OF INSTITUTIONS RPTING INSTL   =  172

 USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT    10:    COLLEGE OR UNIV.    22:    COMMERCIAL    4

                  * INSTALLATION FUNCTION *                                    * LOWEST LEVEL OF RECORD KEEPING *
                 NETWORK   NETWORK    LOCAL                   NO                  SCHOOL                   COURSE     COURSES    INDIVIDUAL
                  ONLY     & LOCAL     ONLY                 RECORDS    CAMPUS     OR COL       DEPT        NUMBER     BY SECT     STUDENTS

          INSTL:   13        18         91                    57          6         20          23           5           6            5
          INST:    13        18         91                    57          6         20          23           5           6            5
          (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS       TOTL STDNT USE, COURSEWK      USE BY FACULTY AND STAFF       *****      MODE/TYPE OF INSTR USE      C    OTHR COMP
 AND DISCIPLINES      **** UNDGR AND GRAD ****      FAC RESRCH  *** OTHER ***      TOTAL     PROB                         O     CA   OFF
                    COURSES STDNTS THOUS$ RESRCH    SPON  N-SPON SFT-DV  MISC      *****     SOLV SIMUL  CAT  CAI  CMI    E     CAMP CAMP

ENGINEERING             82   2664    111      0        0      2      2      4        119       26     7    1    4    0  0-     69    67
                                                                                                                     1-      4     6
          INSTL:    32     32     15      0        0      2      2      2         17       26     7    1    4    0  2-      0     0
          INST:     32     32     15      0        0      2      2      2         17       26     7    1    4    0
          (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND       89    517     10      0        0      0      2      0         12        4     3    1    2    0  0-      8     9
 LIFE SCIENCES                                                                                                       1-      2     1
          INSTL:     9      8      3      0        0      0      1      0          4        4     3    1    2    0  2-      0     0
          INST:      9      8      3      0        0      0      1      0          4        4     3    1    2    0
          (NUMBER REPORTING PER CATEGORY)

COMPUTER               854   7976    595      0        0     16     15      9        635       37     8    4    7    5  0-     56    50
 SCIENCES                                                                                                            1-      4    10
          INSTL:    59     57     30      0        0      5      6      3         32       37     8    4    7    5  2-      0     0
          INST:     59     57     30      0        0      5      6      3         32       37     8    4    7    5
          (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND         67   1448     45      0        0      1      0      2         48       15     2    3    3    1  0-     24    22
 STATISTICS                                                                                                          1-      1     3
          INSTL:    24     21      8      0        0      1      0      1          9       15     2    3    3    1  2-      0     0
          INST:     24     21      8      0        0      1      0      1          9       15     2    3    3    1
          (NUMBER REPORTING PER CATEGORY)

PHYSICAL                13    161      1      0        0      0      0      0          1        4     3    1    2    0  0-      7     7
 SCIENCES                                                                                                            1-      2     2
          INSTL:     9      7      1      0        0      0      0      0          1        4     3    1    2    0  2-      0     0
          INST:      9      7      1      0        0      0      0      0          1        4     3    1    2    0
          (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY               5     60      1      0        0      1      1      0          3        3     1    1    0    0  0-      4     2
                                                                                                                     1-      0     2
          INSTL:     3      2      1      0        0      1      1      0          2        3     1    1    0    0  2-      0     0
          INST:      3      2      1      0        0      1      1      0          2        3     1    1    0    0
          (NUMBER REPORTING PER CATEGORY)

SOCIAL                  21    115      2      0        0      0      0      0          2        3     1    1    1    0  0-      4     4
 SCIENCES                                                                                                            1-      0     0
          INSTL:     4      4      2      0        0      0      0      0          2        3     1    1    1    0  2-      0     0
          INST:      4      4      2      0        0      0      0      0          2        3     1    1    1    0
          (NUMBER REPORTING PER CATEGORY)

EDUCATION               19    265     31      0        0      0      0      0         31        0     1    0    0    0  0-      2     1
                                                                                                                     1-      0     0
          INSTL:     2      2      2      0        0      0      0      0          2        0     1    0    0    0  2-      0     1
          INST:      2      2      2      0        0      0      0      0          2        0     1    0    0    0
          (NUMBER REPORTING PER CATEGORY)

BUSINESS AND           177   4798    117      1        0      0      0      0        118       28    14    0    3    1  0-     40    32
 COMMERCE                                                                                                            1-      1     9
          INSTL:    42     40     19      1        0      0      0      0         19       28    14    0    3    1  2-      1     1
          INST:     42     40     19      1        0      0      0      0         19       28    14    0    3    1
          (NUMBER REPORTING PER CATEGORY)

ALL OTHER               66    975     71      0        0      3      2      0         76       10     5    1    0    2  0-     13    13
                                                                                                                     1-      1     1
          INSTL:    13     12      6      0        0      2      2      0          7       10     5    1    0    2  2-      0     0
          INST:     13     12      6      0        0      2      2      0          7       10     5    1    0    2
          (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                PAGE VIII-17

                                    SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

   GROUP (PUBLIC: ASSOCIATE:2500-9999  )

        TOTAL NUMBER OF INSTITUTIONS              =  332     TOTAL NUMBER OF INSTALLATIONS REPORTED     =  166
        TOTAL NUMBER OF INSTITUTIONS REPORTING =  170     TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =  161

 USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT   13;   COLLEGE OR UNIV.   28;   COMMERCIAL    3

                 * INSTALLATION FUNCTION *                               * LOWEST LEVEL OF RECORD KEEPING *
                 NETWORK  NETWORK   LOCAL              NO                SCHOOL            COURSE    COURSES    INDIVIDUAL
                  ONLY    & LOCAL   ONLY            RECORDS   CAMPUS     OR COL    DEPT    NUMBER    BY SECT     STUDENTS

          INSTL:    9        33       89                36       10         17       30       11         7           15
          INST:     8        33       88                35       10         16       30       11         7           15
          (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS       TOTL STDNT USE, COURSEWK      USE BY FACULTY AND STAFF        *****    MODE/TYPE OF INSTR USE     C   OTHR COMP
 AND DISCIPLINES      **** UNDGR AND GRAD ****      FAC RESRCH  *** OTHER ***       TOTAL    PROB                       O    ON   OFF
                   COURSES STDNTS THOUS$ RESRCH     SPON  N-SPON SFT-DV  MISC       *****    SOLV SIMUL  CAT  CAI  CMI  E   CAMP CAMP

 ENGINEERING          129   3157    167      2        3      0      1      0         173     40     9    2    6    0  0-   68   68
                                                                                                                    1-   10    9
          INSTL:     44     40     21      2        1      0      1      0          21     40     9    2    6    0  2-    1    2
          INST:      44     40     21      2        1      0      1      0          21     40     9    2    6    0
          (NUMBER REPORTING PER CATEGORY)

 ENVIRONMENTAL AND     33   2308     53      0        6      0      0      0          59      6     5    8.   5    3  0-   18   14
  LIFE SCIENCES                                                                                                     1-    0    2
          INSTL:     12     13     11      0        1      0      0      0          11      6     5    8    5    3  2-    0    2
          INST:      12     13     11      0        1      0      0      0          11      6     5    8    5    3
          (NUMBER REPORTING PER CATEGORY)

 COMPUTER            1062  37501   2335     33        1     23     46      8        2446     71    18    9   19    9  0-   75   73
  SCIENCES                                                                                                          1-   16   18
          INSTL:     87     85     50      4        1      6     10      4          50     71    18    9   19    9  2-    0    0
          INST:      87     85     50      4        1      6     10      4          50     71    18    9   19    9
          (NUMBER REPORTING PER CATEGORY)

 MATHEMATICS AND      123   5553    162     42        2     10      8      0         224     40    11    3   13    1  0-   45   42
  STATISTICS                                                                                                        1-    6    7
          INSTL:     45     42     23      2        1      6      3      0          26     40    11    3   13    1  2-    0    2
          INST:      45     42     23      2        1      6      3      0          26     40    11    3   13    1
          (NUMBER REPORTING PER CATEGORY)

 PHYSICAL              71   3056     68      0        0      0      5      0          73     20     9    6    8    4  0-   24   22
  SCIENCES                                                                                                          1-    4    4
          INSTL:     22     23     13      0        0      0      2      0          13     20     9    6    8    4  2-    0    2
          INST:      22     23     13      0        0      0      2      0          13     20     9    6    8    4
          (NUMBER REPORTING PER CATEGORY)

 PSYCHOLOGY            23    475     11      1        0      7      0      0          19      7     2    7    3    1  0-   16   12
                                                                                                                    1-    0    2
          INSTL:      8      9      3      1        0      3      0      0           7      7     2    7    3    1  2-    0    2
          INST:       8      9      3      1        0      3      0      0           7      7     2    7    3    1
          (NUMBER REPORTING PER CATEGORY)

 SOCIAL                21   1021     21      0        2      1      2      1          27      8     6    5    3    1  0-   17   12
  SCIENCES                                                                                                          1-    0    3
          INSTL:     10     10      6      0        1      1      1      1           8      8     6    5    3    1  2-    0    2
          INST:      10     10      6      0        1      1      1      1           8      8     6    5    3    1
          (NUMBER REPORTING PER CATEGORY)

 EDUCATION              1     15      1      0        0      0      0      0           1      1     0    2    1    0  0-    4    2
                                                                                                                    1-    0    0
          INSTL:      1      1      1      0        0      0      0      0           1      1     0    2    1    0  2-    0    2
          INST:       1      1      1      0        0      0      0      0           1      1     0    2    1    0
          (NUMBER REPORTING PER CATEGORY)

 BUSINESS AND         331  12414    396      4        0      1      8     11         420     40    20    8   15    4  0-   52   49
  COMMERCE                                                                                                          1-    9   12
          INSTL:     57     52     25      1        0      1      2      2          27     40    20    8   15    4  2-    0    0
          INST:      57     52     25      1        0      1      2      2          27     40    20    8   15    4
          (NUMBER REPORTING PER CATEGORY)

 ALL OTHER            156   7257    720     41       16      9      5      3         794     12     8    7    8    5  0-   21   20
                                                                                                                    1-    3    3
          INSTL:     14     14      9      2        2      2      3      2          13     12     8    7    8    5  2-    0    1
          INST:      14     14      9      2        2      2      3      2          13     12     8    7    8    5
          (NUMBER REPORTING PER CATEGORY)
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                                        SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

    GROUP (PUBLIC: ASSOCIATE:10000-19999)

          TOTAL NUMBER OF INSTITUTIONS               =  82     TOTAL NUMBEF OF INSTALLATIONS REPORTED      =   38
          TOTAL NUMBER OF INSTITUTIONS REPORTING =   39     TOTAL NUMBER OF INSTITUTIONS RPTING INSTL   =   38

  USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT    3;   COLLEGE OR UNIV.    4;   COMMERCIAL     1

                    * INSTALLATION FUNCTION *                                        * LOWEST LEVEL OF RECORC KEEPING *
                    NETWORK   NETWORK    LOCAL                    NO                 SCHOOL                 COURSE    COURSES   INDIVIDUAL
                     ONLY     & LOCAL     ONLY                  RECORDS    CAMPUS    OR COL      DEPT      NUMBER    BY SECT    STUDENTS

             INSTL:    0         11        19                      13         0         0          10         0         3           2
             INST:     0         11        19                      13         0         0          10         0         3           2
             (NUMBER REPORTING PER CATEGORY)

 ACADEMIC FIELDS       TOTL STDNT USE, COURSEWK       USE DY FACULTY AND STAFF        *****    MODE/TYPE CF INSTR USE      C   OTHR COMP
  AND DISCIPLINES      **** UNDGR AND GRAD ****       FAC RESRCH  *** OTHER ***       TOTAL    PROB                        D    ON   OFF
                    COURSES STDNTS THOUSS RESRCH      SPON  N-SPON SFT-DV  MISC       *****    SOLV SIMUL  CAT  CAI  CMI   E   CAMP CAMP

 ENGINEERING             18    575     42      0         0      2      0      0          44       6     2    0    0    0  0-    19   19
                                                                                                                         1-     2    2
             INSTL:       7      6      3      0         0      2      0      0           4       6     2    0    0    0  2-     0    0
             INST:        7      6      3      0         0      2      0      0           4       6     2    0    0    0
             (NUMBER REPORTING PER CATEGORY)

 ENVIRONMENTAL AND       38    969      9      0         0      0     18      0          27       1     1    1    1    0  0-     4    4
  LIFE SCIENCES                                                                                                          1-     0    0
             INSTL:       4      4      3      0         0      0      1      0           4       1     1    1    1    0  2-     1    1
             INST:        4      4      3      0         0      0      1      0           4       1     1    1    1    0
             (NUMBER REPORTING PER CATEGORY)

 COMPUTER               170  11132    507      0         0     10      0      0         597      12     3    3    3    0  0-    11   10
  SCIENCES                                                                                                               1-     4    4
             INSTL:      15     15      9      0         0      1      0      0           9      12     3    3    3    0  2-     1    2
             INST:       15     15      9      0         0      1      0      0           9      12     3    3    3    0
             (NUMBER REPORTING PER CATEGCRY)

 MATHEMATICS AND         50   3167     95      0         0      5      0      0         100       9     2    1    1    0  0-    10   10
  STATISTICS                                                                                                             1-     2    2
             INSTL:      12     10      6      0         0      1      0      0           6       9     2    1    1    0  2-     1    1
             INST:       12     10      6      0         0      1      0      0           6       9     2    1    1    0
             (NUMBER REPORTING PER CATEGCRY)

 PHYSICAL                16    337     18      0         0      0      0      0          18       4     1    0    0    0  0-     4    3
  SCIENCES                                                                                                               1-     1    2
             INSTL:       5      4      2      0         0      0      0      0           2       4     1    0    0    0  2-     0    0
             INST:        5      4      2      0         0      0      0      0           2       4     1    0    0    0
             (NUMBER REPORTING PER CATEGORY)

 PSYCHOLOGY               1     30      3      0         0      0      0      0           3       1     0    0    0    0  0-     1    2
                                                                                                                         1-     1    0
             INSTL:       1      1      1      0         0      0      0      0           1       1     0    0    0    0  2-     0    0
             INST:        1      1      1      0         0      0      0      0           1       1     0    0    0    0
             (NUMBER REPORTING PER CATEGORY)

 SOCIAL                  17    576      6      0         0      0      6      0          12       0     0    0    1    1  0-     2    2
  SCIENCES                                                                                                               1-     0    0
             INSTL:       2      2      1      0         0      0      1      0           2       0     0    0    1    1  2-     1    1
             INST:        2      2      1      0         0      0      1      0           2       0     0    0    1    1
             (NUMBER REPORTING PER CATEGORY)

 EDUCATION                0      0      0      0         0      0      0      0           0       0     0    0    0    0  0-     0    0
                                                                                                                         1-     0    0
             INSTL:       0      0      0      0         0      0      0      0           0       0     0    0    0    0  2-     0    0
             INST:        0      0      0      0         0      0      0      0           0       0     0    0    0    0
             (NUMBER REPORTING PER CATEGORY)

 BUSINESS AND            28   2308     12      0         0      0      0      0          12       6     2    1    0    0  0-     8    8
  COMMERCE                                                                                                               1-     2    2
             INSTL:       8      8      3      0         0      0      0      0           3       6     2    1    0    0  2-     0    0
             INST:        8      8      3      0         0      0      0      0           3       6     2    1    0    0
             (NUMBER REPORTING PER CATEGORY)

 ALL OTHER                7    200     24      0         0      0      0      0          24       0     1    0    2    0  0-     4    4
                                                                                                                         1-     0    0
             INSTL:       3      3      3      0         0      0      0      0           3       0     1    0    2    0  2-     0    0
             INST:        3      3      3      0         0      0      0      0           3       0     1    0    2    0
             (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
               CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA                          PAGE VIII-19
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                   SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

     GROUP (PUBLIC: ASSOCIATE:ABOVE 20000)

         TOTAL NUMBER OF INSTITUTIONS              =   23      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   18
         TOTAL NUMBER OF INSTITUTIONS REPORTING =   17      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL   =   16

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT    1:   COLLEGE OR UNIV.    0:   COMMERCIAL    0

                  * INSTALLATION FUNCTION *                                  * LOWEST LEVEL OF RECORD KEEPING *
                  NETWORK   NETWORK    LOCAL               NO               SCHOOL               COURSE    COURSES    INDIVIDUAL
                   ONLY     & LOCAL     ONLY             RECORDS   CAMPUS   OR COL     DEPT      NUMBER    BY SECT     STUDENTS

            INSTL:   0         4          8                 5         2        1         1          0          0            2
            INST:    0         4          8                 5         2        1         1          0          0            2
            (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS      TOTL STDNT USE, COURSEWK     USE BY FACULTY AND STAFF      *****   MODE/TYPE OF INSTR USE      C  OTHR COMP
AND DISCIPLINES      **** UNDGR AND GRAD ****     FAC RESRCH  *** OTHER ***     TOTAL   PROB                        D   ON   OFF
                   COURSES STDNTS THOUS$ RESRCH   SPON  N-SPON SFT-DV  MISC     *****   SOLV SIMUL  CAT  CAI  CMI   E  CAMP CAMP

ENGINEERING            52   4126     11      0      0      5      4      0        20     6    5    1    3    1  0-    9   10
                                                                                                               1-    1    0
            INSTL:      6      7      3      0      0      1      2      0         3     6    5    1    3    1  2-    0    0
            INST:       6      7      3      0      0      1      2      0         3     6    5    1    3    1
            (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND     101   4504      5      0      0      2      3      2        12     2    2    3    3    1  0-    3    4
 LIFE SCIENCES                                                                                                 1-    1    0
            INSTL:      3      4      3      0      0      1      1      1         3     2    2    3    3    1  2-    0    0
            INST:       3      4      3      0      0      1      1      1         3     2    2    3    3    1
            (NUMBER REPORTING PER CATEGORY)

COMPUTER              129   8413    161      0      0     10     22      0       193     5    1    2    2    2  0-    4    7
 SCIENCES                                                                                                      1-    3    0
            INSTL:      6      7      3      0      0      1      2      0         3     5    1    2    2    2  2-    0    0
            INST:       6      7      3      0      0      1      2      0         3     5    1    2    2    2
            (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND       126   6911    755      0      0      3      3      0       761     5    2    2    3    0  0-    7    7
 STATISTICS                                                                                                    1-    0    0
            INSTL:      6      7      3      0      0      1      2      0         3     5    2    2    3    0  2-    0    0
            INST:       6      7      3      0      0      1      2      0         3     5    2    2    3    0
            (NUMBER REPORTING PER CATEGORY)

PHYSICAL               52   5593    212      0      0      3      3      2       220     4    2    2    3    0  0-    5    5
 SCIENCES                                                                                                      1-    0    0
            INSTL:      4      5      3      0      0      2      2      1         3     4    2    2    3    0  2-    0    0
            INST:       4      5      3      0      0      2      2      1         3     4    2    2    3    0
            (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY             24   6880      4      0      0      6      0      2        12     2    2    1    1    0  0-    4    4
                                                                                                               1-    0    0
            INSTL:      4      3      1      0      0      2      0      1         2     2    2    1    1    0  2-    0    0
            INST:       4      3      1      0      0      2      0      1         2     2    2    1    1    0
            (NUMBER REPORTING PER CATEGORY)

SOCIAL                 65   6594     35      0      0      4      5      2        46     0    0    1    1    1  0-    3    3
 SCIENCES                                                                                                      1-    0    0
            INSTL:      3      2      1      0      0      2      1      1         2     0    0    1    1    1  2-    0    0
            INST:       3      2      1      0      0      2      1      1         2     0    0    1    1    1
            (NUMBER REPORTING PER CATEGORY)

EDUCATION               0      0      0      0      0      0      0      0         0     0    0    0    0    0  0-    0    0
                                                                                                               1-    0    0
            INSTL:      0      0      0      0      0      0      0      0         0     0    0    0    0    0  2-    0    0
            INST:       0      0      0      0      0      0      0      0         0     0    0    0    0    0
            (NUMBER REPORTING PER CATEGORY)

BUSINESS AND           85   2997      6      0      0      0      2      0         8     4    1    1    2    1  0-    6    6
 COMMERCE                                                                                                      1-    0    0
            INSTL:      5      6      3      0      0      0      1      0         3     4    1    1    2    1  2-    0    0
            INST:       5      6      3      0      0      0      1      0         3     4    1    1    2    1
            (NUMBER REPORTING PER CATEGORY)

ALL OTHER              28   6105     16      0      0      0      2      2        20     1    1    2    4    0  0-    5    5
                                                                                                               1-    0    0
            INSTL:      4      5      3      0      0      0      1      1         3     1    1    2    4    0  2-    0    0
            INST:       4      5      3      0      0      0      1      1         3     1    1    2    4    0
            (NUMBER REPORTING PER CATEGORY)
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                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                 SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

    GROUP (PUBLIC: BACHELORS:500-2499   )

         TOTAL NUMBER OF INSTITUTIONS            =   55     TOTAL NUMBER OF INSTALLATIONS REPORTED     =   35
         TOTAL NUMBER OF INSTITUTIONS REPORTING =   34     TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =   32

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT    5:   COLLEGE OR UNIV.   14:   COMMERCIAL    1

                   * INSTALLATION FUNCTION *                                      * LOWEST LEVEL OF RECORD KEEPING *
                   NETWORK   NETWORK    LOCAL                       NO                   SCHOOL                COURSE     COURSES    INDIVIDUAL
                    ONLY     & LOCAL     ONLY                     RECORDS    CAMPUS      OR COL      DEPT      NUMBER     BY SECT     STUDENTS

             INSTL:   1         15        14                         8          1           5          6          1          2            6
             INST:    1         15        11                         8          1           4          6          1          2            6
             (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS        TOTL STDNT USE, COURSEWK       USE BY FACULTY AND STAFF        *****     MODE/TYPE OF INSTR USE      C   OTHR COMP
 AND DISCIPLINES       *:** UNDGR AND GRAD ****       FAC RESRCH  *** OTHER ***        TOTAL    PROB                        O    ON   OFF
                    COURSES STDNTS THOUS& RESRCH      SPON  N-SPON  SFT-DV  MISC       *****    SOLV SIMUL  CAT  CAI  CMI  E    CAMP CAMP

ENGINEERING            93   2911    125      8          5     10      10      0         158       7     3    1    0    1  0-    12   14
                                                                                                                        1-     3    2
             INSTL:     9      8      5      2          1      5       1      0           6       7     3    1    0    1  2-     0    0
             INST:      8      8      5      2          1      5       1      0           6       7     3    1    0    1
             (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND      26    269     17      5          3      3       0      0          28       8     6    1    1    1  0-    11    8
 LIFE SCIENCES                                                                                                          1-     0    4
             INSTL:    11     10      4      1          2      3       0      0           5       8     6    1    1    1  2-     0    0
             INST:     11     10      4      1          2      3       0      0           5       8     6    1    1    1
             (NUMBER REPORTING PER CATEGORY)

COMPUTER              128   3435    170      7          0      2       2     11         192      14     6    2    3    2  0-    17   12
 SCIENCES                                                                                                               1-     1    6
             INSTL:    18     17      7      3          0      2       2      2           7      14     6    2    3    2  2-     0    0
             INST:     18     17      7      3          0      2       2      2           7      14     6    2    3    2
             (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND        67   1334     48      6          2      5       2      0          63      12     1    0    4    0  0-    17   15
 STATISTICS                                                                                                             1-     0    2
             INSTL:    17     16      3      1          1      2       1      0           4      12     1    0    4    0  2-     0    0
             INST:     16     15      3      1          1      2       1      0           4      12     1    0    4    0
             (NUMBER REPORTING PER CATEGORY)

PHYSICAL               50    952     15      0          2      3       0      1          21       7     2    2    3    1  0-    13   11
 SCIENCES                                                                                                               1-     0    3
             INSTL:    13     12      4      0          2      3       0      1           6       7     2    2    3    1  2-     0    0
             INST:     13     12      4      0          2      3       0      1           6       7     2    2    3    1
             (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY              4     49      0      0          0      0       0      0           0       2     0    1    0    0  0-     4    5
                                                                                                                        1-     0    0
             INSTL:     4      3      0      0          0      0       0      0           0       2     0    1    0    0  2-     0    0
             INST:      4      3      0      0          0      0       0      0           0       2     0    1    0    0
             (NUMBER REPORTING PER CATEGORY)

SOCIAL                 23    487     32      0          1      5       7      0          45       7     2    2    0    0  0-    11    7
 SCIENCES                                                                                                               1-     0    4
             INSTL:    10      8      5      0          1      4       2      0           6       7     2    2    0    0  2-     0    0
             INST:     10      8      5      0          1      4       2      0           6       7     2    2    0    0
             (NUMBER REPORTING PER CATEGORY)

EDUCATION               7    250      0      0          1      0       0      0           1       1     1    1    2    1  0-     4    2
                                                                                                                        1-     0    2
             INSTL:     2      2      0      0          1      0       0      0           1       1     1    1    2    1  2-     0    0
             INST:      2      2      0      0          1      0       0      0           1       1     1    1    2    1
             (NUMBER REPORTING PER CATEGORY)

BUSINESS AND           26    711     18      3          0      7       1      0          29       6     6    0    0    0  0-    14   11
 COMMERCE                                                                                                               1-     0    3
             INSTL:    13     12      4      1          0      4       1      0           6       6     6    0    0    0  2-     0    0
             INST:     13     12      4      1          0      4       1      0           6       6     6    0    0    0
             (NUMBER REPORTING PER CATEGORY)

ALL OTHER              22    317      1      0          0     11       2      0          14       4     2    1    3    1  0-     6    6
                                                                                                                        1-     1    1
             INSTL:     5      4      1      0          0      4       1      0           4       4     2    1    3    1  2-     0    0
             INST:      4      4      1      0          0      4       1      0           4       4     2    1    3    1
             (NUMBER REPORTING PER CATEGORY)
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                 CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSCURI-ROLLA
                            UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                 PAGE VIII-21

                                   SUMMARY OF INSTRUCTICNAL AND RESEARCH USE

    GROUP (PUBLIC: BACHELCRS:2500-9999  )

         TOTAL NUMBER OF INSTITUTIONS             =   36     TOTAL NUMBER OF INSTALLATICNS REPORTED     =   26
         TOTAL NUMBER OF INSTITUTICNS REPORTING =   24     TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =   24

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. CR NON PROFIT    3:   COLLEGE OR UNIV.    9:   COMMERCIAL    0

                  * INSTALLATION FUNCTION *                                      * LOWEST LEVEL CF RECORC KEEPING *
                  NETWORK   NETWCRK  . LOCAL                      NO                  SCHOOL                  COURSE    COURSES    INDIVIDUAL
                   ONLY     & LCCAL    ONLY                    RECORDS    CAMPUS    OP COL       DEPT      NUMBER    BY SECT     STUDENTS

             INSTL:   2         6        17                        4         5          4           2          2          1           8
             INST:    2         6        16                        4         5          4           2          2          1           6
             (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS        TOTL STDNT USE, COURSEWK        USE BY FACULTY AND STAFF         *****     MODE/TYPE OF INSTR USE      C    OTHR COMP
 AND DISCIPLINES       **** UNDGR AND GRAD ****        FAC RESRCH  *** OTHER ***        TOTAL     PROB                        D     ON   OFF
                   COURSES STDNTS THOUS$ RESRCH        SPON  N-SPON SFT-DV  MISC        *****     SOLV SIMUL  CAT  CAI  CMI   E    CAMP CAMP

ENGINEERING            96   4035     28      0           0      0      0      0           28        7     5     3    1    0   0-    14   13
                                                                                                                              1-     2    3
             INSTL:     9      8      6      0           0      0      0      0            6        7     5     3    1    0   2-     0    0
             INST:      8      8      6      0           0      0      0      0            6        6     4     3    1    0
             (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND       7    150      5      0           0      5      0      0           10        3     1     2    1    0   0-     7    6
 LIFE SCIENCES                                                                                                                1-     0    1
             INSTL:     3      3      4      0           0      1      0      0            5        3     1     2    1    0   2-     0    0
             INST:      3      3      4      0           0      1      0      0            5        3     1     2    1    0
             (NUMBER REPORTING PER CATEGORY)

COMPUTER              154   2892     70      2           1      3      0      0           76       11     7     3    3    2   0-    13   10
 SCIENCES                                                                                                                     1-     1    4
             INSTL:    13     11      7      1           1      1      0      0            7       11     7     3    3    2   2-     0    0
             INST:     12     11      7      1           1      1      0      0            7       10     6     3    3    2
             (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND        48   3139     13      0           3      2      0      0           18        9     3     3    2    1   0-    13   11
 STATISTICS                                                                                                                   1-     1    3
             INSTL:    12     11      4      0           1      1      0      0            5        9     3     3    2    1   2-     0    0
             INST:     11     11      4      0           1      1      0      0            5        8     2     3    2    1
             (NUMBER REPORTING PER CATEGCRY)

PHYSICAL               19   1381      7      0           4      3      0      0           14        4     2     2    2    0   0-     7    4
 SCIENCES                                                                                                                     1-     1    4
             INSTL:     6      6      4      0           2      2      0      0            5        4     2     2    2    0   2-     0    0
             INST:      6      6      4      0           2      2      0      0            5        4     2     2    2    0
             (NUMBER REPORTING PER CATEGCRY)

PSYCHOLOGY              5     65      3      0           0      0      0      0            3        3     1     3    1    1   0-     5    5
                                                                                                                              1-     0    0
             INSTL:     2      2      3      0           0      0      0      0            3        3     1     3    1    1   2-     0    0
             INST:      2      2      3      0           0      0      0      0            3        3     1     3    1    1
             (NUMBER REPORTIAG PER CATEGORY)

SOCIAL                 16    392     11      0           0      5      0      0           16        3     1     2    1    0   0-     7    5
 SCIENCES                                                                                                                     1-     0    2
             INSTL:     4      4      4      0           0      2      0      0            5        3     1     2    1    0   2-     0    0
             INST:      4      4      4      0           0      2      0      0            5        3     1     2    1    0
             (NUMBER REPORTING PER CATEGORY)

EDUCATION               0      0      3      0           0      0      0      0            3        1     0     2    0    0   0-     3    3
                                                                                                                              1-     0    0
             INSTL:     0      0      2      0           0      0      0      0            2        1     0     2    0    0   2-     0    0
             INST:      0      0      2      0           0      0      0      0            2        1     0     2    0    0
             (NUMBER REPORTING PER CATEGORY)

BUSINESS AND           66   2345     22      0           0      2      0      0           24       12     4     3    1    0   0-    16   10
 COMMERCE                                                                                                                     1-     0    6
             INSTL:    14     14      6      0           0      1      0      0            7       12     4     3    1    0   2-     0    0
             INST:     14     14      6      0           0      1      0      0            7       12     4     3    1    0
             (NUMBER REPORTING PER CATEGORY)

ALL OTHER              19   1054    106      0           0      0      0      0          106        3     1     0    1    0   0-     5    4
                                                                                                                              1-     1    2
             INSTL:     4      4      4      0           0      0      0      0            4        3     1     0    1    0   2-     0    0
             INST:      4      4      4      0           0      0      0      0            4        3     1     0    1    0
             (NUMBER REPORTING PER CATEGORY)
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                                      SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

     GROUP (PUBLIC; MASTERS;  BELOW 500  )

          TOTAL NUMBER OF INSTITUTIONS            =   11      TOTAL NUMBER OF INSTALLATICNS REPORTEC     =    4
          TOTAL NUMBER OF INSTITUTIONS REPORTING =    6      TOTAL NUMBER OF INSTITUTIUNS RPTING INSTL  =    4

  USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NCN PROFIT    0;   COLLEGE OR UNIV.   0;   COMMERCIAL    0

                       * INSTALLATION FUNCTION *                                      * LOWEST LEVEL OF RECORD KEEPING *
                      NETWORK   NETWORK    LOCAL                 NO                  SCHOOL                 COURSE    COURSES    INDIVIDUAL
                       ONLY     & LOCAL    ONLY                RECORDS    CAMPUS     CR COL       DEPT      NUMBER    BY SECT     STUDENTS

              INSTL:    1          0         1                    0          0          0           1          0          0            1
              INST:     1          0         1                    0          0          0           1          0          0            1
              (NUMBFR REPORTING PER CATEGORY)

  ACADEMIC FIELDS        TCTL STDNT USE, COURSEWK        USE BY FACULTY AND STAFF         *****    MODE/TYPE OF INSTR USE     C    OTHR COMP
   AND DISCIPLINES       **** UNDGR AND GRAD ****        FAC RESRCH  *** OTHER ***        TOTAL    PROB                       D     ON   OFF
                       COURSES STDNTS THOUS$ RESRCH      SPON   N-SPON SFT-DV  MISC       *****    SOLV SIMUL  CAT  CAI  CHI  E    CAMP CAMP

  ENGINEERING              6     24      2      0          0      0      6      1           9       2    1     1    1    0   0-     2    1
                                                                                                                             1-     0    1
              INSTL:       2      2      2      0          0      0      1      1           2       2    1     1    1    0   2-     0    0
              INST:        2      2      2      0          0      0      1      1           2       2    1     1    1    0
              (NUMBER REPORTING PER CATEGORY)

  ENVIRONMENTAL AND        0      0      0      0          0      0      0      0           0       0    0     0    0    0   0-     0    0
   LIFE SCIENCES                                                                                                             1-     0    0
              INSTL:       0      0      0      0          0      0      0      0           0       0    0     0    0    0   2-     0    0
              INST:        0      0      0      0          0      0      0      0           0       0    0     0    0    0
              (NUMBER REPORTING PER CATEGORY)

  COMPUTER                 7     60      1      0          0      2      0      4           7       1    1     0    0    0   0-     1    0
   SCIENCES                                                                                                                  1-     0    1
              INSTL:       1      1      1      0          0      1      0      1           1       1    1     0    0    0   2-     0    0
              INST:        1      1      1      0          0      1      0      1           1       1    1     0    0    0
              (NUMBER REPORTING PER CATEGORY)

  MATHEMATICS AND          1     64      3      1          1      0      6      1          12       1    0     1    1    0   0-     1    1
   STATISTICS                                                                                                                1-     0    0
              INSTL:       1      1      1      1          1      0      1      1           1       1    0     1    1    0   2-     0    0
              INST:        1      1      1      1          1      0      1      1           1       1    0     1    1    0
              (NUMBER REPORTING PER CATEGORY)

  PHYSICAL                 2      8      0      0          0      0      0      0           0       1    0     0    1    0   0-     1    1
   SCIENCES                                                                                                                  1-     0    0
              INSTL:       1      1      0      0          0      0      0      0           0       1    0     0    1    0   2-     0    0
              INST:        1      1      0      0          0      0      0      0           0       1    0     0    1    0
              (NUMBER REPORTING PER CATEGORY)

  PSYCHOLOGY               2    102     10      1          2      1     10      1          25       1    0     0    1    0   0-     1    1
                                                                                                                             1-     0    0
              INSTL:       1      1      1      1          1      1      1      1           1       1    0     0    1    0   2-     0    0
              INST:        1      1      1      1          1      1      1      1           1       1    0     0    1    0
              (NUMBER REPCRTING PER CATEGCRY)

  SOCIAL                   0      0      0      0          0      0      0      0           0       0    0     0    0    0   0-     0    0
   SCIENCES                                                                                                                  1-     0    0
              INSTL:       0      0      0      0          0      0      0      0           0       0    0     0    0    0   2-     0    0
              INST:        0      0      0      0          0      0      0      0           0       0    0     0    0    0
              (NUMBER REPORTING PER CATEGCRY)

  EDUCATION                0      0      0      0          0      0      0      0           0       0    0     0    0    0   0-     0    0
                                                                                                                             1-     0    0
              INSTL:       0      0      0      0          0      0      0      0           0       0    0     0    0    0   2-     0    0
              INST:        0      0      0      0          0      0      0      0           0       0    0     0    0    0
              (NUMBER REPCRTING PER CATEGORY)

  BUSINESS AND             2     19      1      0          0      0      1      0           2       1    1     0    0    0   0-     1    0
   COMMERCE                                                                                                                  1-     0    1
              INSTL:       1      1      1      0          0      0      1      0           1       1    1     0    0    0   2-     0    0
              INST:        1      1      1      0          0      0      1      0           1       1    1     0    0    0
              (NUMBER REPORTING PER CATEGORY)

  ALL OTHER                2     15      1      1          0      0      0      1           3       1    0     1    1    0   0-     1    1
                                                                                                                             1-     0    0
              INSTL:       1      1      1      1          0      0      0      1           1       1    0     1    1    0   2-     0    0
              INST:        1      1      1      1          0      0      0      1           1       1    0     1    1    0
              (NUMBER REPCRTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                   SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

     GROUP (PUBLIC; MASTERS;  500-2499   )

          TOTAL NUMBER OF INSTITUTIONS             =   39      TOTAL NUMBER OF INSTALLATIONS REPORTED      =  23
          TOTAL NUMBER OF INSTITUTIONS REPORTING =   22      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =  21

   USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT     0;   COLLEGE OR UNIV.    7;   COMMERCIAL    0

                     * INSTALLATION FUNCTION *                          * LOWEST LEVEL OF RECORD KEEPING *
                     NETWORK   NETWORK    LOCAL              NO               SCHOOL            COURSE    COURSES   INDIVIDUAL
                      ONLY     & LOCAL    ONLY             RECORDS   CAMPUS   OR COL    DEPT    NUMBER    BY SECT    STUDENTS

             INSTL:    0          1        14                 5         0        1        4        2         1           2
             INST:     0          1        14                 5         0        1        4        2         1           2
             (NUMBER REPORTING PER CATEGORY)

 ACADEMIC FIELDS      TOTL STDNT USE, COURSEWK      USE BY FACULTY AND STAFF     *****    MODE/TYPE OF INSTR USE     C   OTHR COMP
  AND DISCIPLINES     **** UNDGR AND GRAD ****      FAC RESRCH  *** OTHER ***    TOTAL   PROB                        D    ON   OFF
                    COURSES STDNTS THOUS$ RESRCH    SPON  N-SPON SFT-DV  MISC    *****   SOLV SIMUL  CAT  CAI  CMI   E   CAMP CAMP

 ENGINEERING            8     90     15      2        2      1      0      0       20      2     2    1    0    1  0-     4    5
                                                                                                                  1-     1    0
             INSTL:     3      3      1      1        1      1      0      0        2      2     2    1    0    1  2-     0    0
             INST:      3      3      1      1        1      1      0      0        2      2     2    1    0    1
             (NUMBER REPORTING PER CATEGORY)

 ENVIRONMENTAL AND      9     90      0      0        1      0      1      0        2      2     1    1    0    0  0-     4    5
  LIFE SCIENCES                                                                                                   1-     1    0
             INSTL:     4      2      0      0        1      0      1      0        1      2     1    1    0    0  2-     0    0
             INST:      4      2      0      0        1      0      1      0        1      2     1    1    0    0
             (NUMBER REPORTING PER CATEGORY)

 COMPUTER              77   1905    378      6        0      8      1      0      393      7     2    2    1    1  0-     9   10
  SCIENCES                                                                                                        1-     2    1
             INSTL:    11      9      6      2        0      2      1      0        6      7     2    2    1    1  2-     0    0
             INST:     11      9      6      2        0      2      1      0        6      7     2    2    1    1
             (NUMBER REPORTING PER CATEGORY)

 MATHEMATICS AND       30    911    365      4       29     10      0      0      408      9     2    1    3    1  0-     8    8
  STATISTICS                                                                                                      1-     2    2
             INSTL:    10      8      6      2        2      1      0      0        6      9     2    1    3    1  2-     0    0
             INST:     10      8      6      2        2      1      0      0        6      9     2    1    3    1
             (NUMBER REPORTING PER CATEGORY)

 PHYSICAL              14    195      7      1        0      3      0      0       11      4     3    0    2    2  0-     5    6
  SCIENCES                                                                                                        1-     1    0
             INSTL:     6      4      2      1        0      1      0      0        2      4     3    0    2    2  2-     0    0
             INST:      6      4      2      1        0      1      0      0        2      4     3    0    2    2
             (NUMBER REPORTING PER CATEGORY)

 PSYCHOLOGY             5     30     21      1        0      1      1      0       24      4     0    0    0    0  0-     6    6
                                                                                                                  1-     0    0
             INSTL:     5      4      2      1        0      1      1      0        4      4     0    0    0    0  2-     0    0
             INST:      5      4      2      1        0      1      1      0        4      4     0    0    0    0
             (NUMBER REPORTING PER CATEGORY)

 SOCIAL                 9    160      3      0        0      0      0      0        3      1     0    2    0    0  0-     4    4
  SCIENCES                                                                                                        1-     0    0
             INSTL:     4      3      2      0        0      0      0      0        2      1     0    2    0    0  2-     0    0
             INST:      4      3      2      0        0      0      0      0        2      1     0    2    0    0
             (NUMBER REPORTING PER CATEGORY)

 EDUCATION             13    521      6      5        0      0      0      0       11      4     0    2    1    0  0-     4    4
                                                                                                                  1-     1    1
             INSTL:     4      3      3      2        0      0      0      0        4      4     0    2    1    0  2-     0    0
             INST:      4      3      3      2        0      0      0      0        4      4     0    2    1    0
             (NUMBER REPORTING PER CATEGORY)

 BUSINESS AND          51   1175     13      1        1      0      1      0       16      7     5    1    0    0  0-     8    9
  COMMERCE                                                                                                        1-     1    0
             INSTL:    10      8      4      1        1      0      1      0        4      7     5    1    0    0  2-     1    1
             INST:     10      8      4      1        1      0      1      0        4      7     5    1    0    0
             (NUMBER REPORTING PER CATEGORY)

 ALL OTHER              3      6      1      0        5      0      3      2       11      2     0    0    0    0  0-     3    3
                                                                                                                  1-     0    0
             INSTL:     2      1      1      0        1      0      1      1        2      2     0    0    0    0  2-     0    0
             INST:      2      1      1      0        1      0      1      1        2      2     0    0    0    0
             (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

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   GROUP (PUBLIC; MASTERS:  2500-9999  )

        TOTAL NUMBER OF INSTITUTIONS              =  172      TOTAL NUMBER OF INSTALLATICNS REPORTED        =  110
        TOTAL NUMBER OF INSTITUTIONS REPORTING =  101      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =   98

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT    6:   COLLEGE OR UNIV.   31:   COMMERCIAL    2

                 * INSTALLATION FUNCTION *                               * LOWEST LEVEL OF RECORD KEEPING *
                 NETWORK   NETWORK    LOCAL                 NC                  SCHOOL              COURSE    COURSES    INDIVIDUAL
                  ONLY     & LOCAL    ONLY               RECORDS    CAMPUS     OR CCL     DEPT     NUMBER    BY SECT     STUDENTS

          INSTL:    6        43        49                   27        14          5        24        11         6           13
          INST:     5        43        48                   27        14          5        24        11         6           13
          (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS        TOTL STDNT USE, COURSEWK       USE BY FACULTY AND STAFF        *****    MODE/TYPE OF INSTR USE      C   OTHR COMP
AND DISCIPLINES        **** UNDGR AND GRAD ****       FAC RESRCH  *** OTHER ***       TOTAL    PROB                        D    ON   OFF
                     COURSES STDNTS THOUS$ RESRCH     SPON  N-SPON SFT-DV  MISC       *****    SOLV SIMUL  CAT  CAI  CMI   E   CAMP CAMP

ENGINEERING            161   7357    591      1        12     98      0      0          702     17     9    0    1    0  0-    32   34
                                                                                                                        1-     7    6
          INSTL:       17     16     11       1         2      4      0      0           12     17     9    0    1    0  2-     1    0
          INST:        17     16     11       1         2      4      0      0           12     17     9    0    1    0
          (NUMBER REPORTING PER CATEGCRY)

ENVIRONMENTAL AND      118   3945     89     26         9     39      4      8          175     19    14    5    5    4  0-    20   21
 LIFE SCIENCES                                                                                                          1-     7    6
          INSTL:       21     20     15       2         3     10      2      2           20     19    14    5    5    4  2-     1    1
          INST:        21     20     15       2         3     10      2      2           20     19    14    5    5    4
          (NUMBER REPORTING PER CATEGCRY)

COMPUTER               827  29364   1406     20        20     49     34      9         1538     48    29    9   11    2  0-    46   39
 SCIENCES                                                                                                               1-    12   19
          INSTL:       51     52     36       7         6     12      9      4           39     48    29    9   11    2  2-     2    2
          INST:        51     52     36       7         6     12      9      4           39     48    29    9   11    2
          (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND        382  11001    302      8         8    113      7      4          442     59    21    7    8    2  0-    53   48
 STATISTICS                                                                                                             1-    17   23
          INSTL:       65     61     36       3         3     14      3      1           40     59    21    7    8    2  2-     2    1
          INST:        64     60     36       3         3     14      3      1           40     58    21    7    8    2
          (NUMBER REPORTING PER CATEGORY)

PHYSICAL               219   7149    146      2        17     53      6     10          234     37    16    8    8    4  0-    35   34
 SCIENCES                                                                                                               1-     6    8
          INSTL:       36     32     22       2         3     14      3      1           27     37    16    8    8    4  2-     2    1
          INST:        36     32     22       2         3     14      3      1           27     37    16    8    8    4
          (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY             107   4968    105     14        13     26     10      6          174     28     9    9    2    3  0-    30   29
                                                                                                                        1-     8    9
          INSTL:       32     30     20       3         4     13      5      2           25     28     9    9    2    3  2-     1    1
          INST:        32     30     20       3         4     13      5      2           25     28     9    9    2    3
          (NUMBER REPORTING PER CATEGORY)

SOCIAL                 169   6990    175     10        23     59     24     11          302     35    17   11    7    4  0-    39   34
 SCIENCES                                                                                                               1-     8   12
          INSTL:       41     41     23       4         6     15      4      2           29     35    17   11    7    4  2-     1    2
          INST:        40     40     23       4         6     15      4      2           29     34    17   11    7    4
          (NUMBER REPORTING PER CATEGORY)

EDUCATION              131   3918     65     17         5     31     10      7          135     22    13    8   11    7  0-    28   27
                                                                                                                        1-     5    6
          INSTL:       27     26     16       7         2     12      3      4           22     22    13    8   11    7  2-     1    1
          INST:        27     26     16       7         2     12      3      4           22     22    13    8   11    7
          (NUMBER REPORTING PER CATEGCRY)

BUSINESS AND           403  26794    509      9        11     50     11     17          607     52    39    8    9    5  0-    53   48
 COMMERCE                                                                                                               1-     9   13
          INSTL:       57     57     38       5         2     15      6      5           42     52    39    8    9    5  2-     2    3
          INST:        56     56     38       5         2     15      6      5           42     51    39    8    9    5
          (NUMBER REPORTING PER CATEGORY)

ALL OTHER              119   3270    114     32        42     30     23     52          293     15     8    9    7    4  0-    24   24
                                                                                                                        1-     6    6
          INSTL:       21     20     14       6         2     11      2      3           24     15     8    9    7    4  2-     2    2
          INST:        21     20     14       6         2     11      2      3           24     15     8    9    7    4
          (NUMBER REPORTING PER CATEGOPY)
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                               SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

     GROUP (PUBLIC; MASTERS;  10000-19999)

          TOTAL NUMBER OF INSTITUTIONS             =   37      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   38
          TOTAL NUMBER OF INSTITUTIONS REPORTING =   29      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =   27

  USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT   11;   COLLEGE OR UNIV.   5;   COMMERCIAL   1

                       * INSTALLATION FUNCTION *                                    * LOWEST LEVEL OF RECORD KEEPING *
                       NETWORK   NETWORK    LOCAL                  NO                SCHOOL              COURSE    COURSES   INDIVIDUAL
                        ONLY     & LOCAL    ONLY                 RECORDS   CAMPUS    OR COL     DEPT     NUMBER    BY SECT    STUDENTS

                INSTL:    1         15        11                    3         7         1          8        4          1          3
                INST:     1         15        10                    3         7         1          8        4          1          2
                (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS       TOTL STDNT USE, COURSEWK        USE BY FACULTY AND STAFF      *****    MODE/TYPE OF INSTR USE       C   OTHR COMP
 AND DISCIPLINES      **** UNDGR AND GRAD ****        FAC RESRCH  *** OTHER ***      TOTAL    PROB                          O    ON    OFF
                    COURSES STDNTS THOUS$ RESRCH     SPON  N-SPON SFT-DV  MISC      *****    SULV SIMUL  CAT  CAI  CMI   E   CAMP  CAMP

ENGINEERING           224   6048     74      6          1      6      8      0         95      5     4     1    1    0  0-     9    12
                                                                                                                     1-     6     3
                INSTL:  6      6      4      3          1      3      1      0          4      5     4     1    1    0  2-     0     0
                INST:   5      5      3      2          1      2      1      0          3      5     3     1    1    0
                (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND      42   1705     13     13          8      8      1      2         45     10     5     6    3    0  0-    10     6
 LIFE SCIENCES                                                                                                       1-     3     7
                INSTL: 10     10      5      4          5      4      1      1          8     10     5     6    3    0  2-     0     0
                INST:  10     10      5      4          5      4      1      1          8     10     5     6    3    0
                (NUMBER REPORTING PER CATEGORY)

COMPUTER              400  12351    580     16        127    131    179      3       1036     13    10     4    6    2  0-     5     7
 SCIENCES                                                                                                            1-    11     9
                INSTL: 16     16     11      6          3      7      7      2         12     13    10     4    6    2  2-     0     0
                INST:  14     14     11      6          3      7      7      2         12     12     9     4    6    2
                (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND       130   5794    200     13          7     19      4      3        246     16     9     4    5    1  0-    11    10
 STATISTICS                                                                                                          1-     6     8
                INSTL: 17     15     12      3          2      6      3      2         12     16     9     4    5    1  2-     1     0
                INST:  17     15     12      3          2      6      3      2         12     16     9     4    5    1
                (NUMBER REPORTING PER CATEGORY)

PHYSICAL              132   6671    113     13          3     19     17      3        168     15    10     6    4    3  0-     8    13
 SCIENCES                                                                                                            1-     9     5
                INSTL: 17     16     10      3          2      7      5      2         11     15    10     6    4    3  2-     1     0
                INST:  17     16     10      3          2      7      5      2         11     15    10     6    4    3
                (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY             59   2956     40     12          8     15      4      3         82     11     8     6    3    1  0-    10    10
                                                                                                                     1-     6     6
                INSTL: 15     13      8      5          2      5      3      2         10     11     8     6    3    1  2-     0     0
                INST:  15     13      8      5          2      5      3      2         10     11     8     6    3    1
                (NUMBER REPORTING PER CATEGORY)

SOCIAL                166   5171    116     26         11     26     10      3        192     11     6     6    3    0  0-    13     9
 SCIENCES                                                                                                            1-     3     7
                INSTL: 15     14     10      4          3      7      5      2         11     11     6     6    3    0  2-     0     0
                INST:  15     14     10      4          3      7      5      2         11     11     6     6    3    0
                (NUMBER REPORTING PER CATEGORY)

EDUCATION              74   2175     19     13          7     11      3      2         55     12     4     3    2    0  0-    11     9
                                                                                                                     1-     4     6
                INSTL: 14     13      6      4          2      5      3      1         10     12     4     3    2    0  2-     0     0
                INST:  13     12      6      3          2      5      3      1          9     11     4     3    2    0
                (NUMBER REPORTING PER CATEGORY)

BUSINESS AND          343  22428    323     65         22     16     11      4        441     15    13     3    3    1  0-    11    12
 COMMERCE                                                                                                            1-     7     6
                INSTL: 18     18     10      4          3      4      4      2         10     15    13     3    3    1  2-     0     0
                INST:  17     17      9      4          3      4      4      2          9     14    13     3    3    1
                (NUMBER REPORTING PER CATEGORY)

ALL OTHER             102   2639     78     14         23      9     10     10        144     10     5     7    3    1  0-     8     8
                                                                                                                     1-     6     6
                INSTL: 12     11      4      3          3      3      3      3          8     10     5     7    3    1  2-     0     0
                INST:  12     11      4      3          3      3      3      3          8     10     5     7    3    1
                (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATICNS CF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSCURI-ROLLA
UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

SUMMARY OF INSTRUCTIONAL ANC RESEARCH USE

GROUP (PUBLIC: MASTERS: ABOVE 20000)

TOTAL NUMBER OF INSTITUTIONS = 9 TOTAL NUMBER OF INSTALLATIONS REPORTED = 4
TOTAL NUMBER OF INSTITUTIONS REPORTING = 3 TOTAL NUMBER OF INSTITUTICNS RPTING INSTL = 3

USE CF OFF-CAMPUS COMPUTERS BY INSTAL: COOP. OR NON PROFIT 0: COLLEGE OR UNIV. 3: COMMERCIAL 0

	* INSTALLATION FUNCTION *			* LOWEST LEVEL OF RECORD KEEPING *						
	NETWORK ONLY	NETWORK & LOCAL	LOCAL ONLY	NO RECORDS	CAMPUS	SCHOCL OR COL	DEPT	COURSE NUMBER	COURSES BY SECT	INDIVIDUAL STUDENTS
INSTL:	0	3	1	0	0	0	2	0	0	2
INST:	0	3	1	0	0	0	1	0	0	2
(NUMBER REPORTING PER CATEGORY)										

ACADEMIC FIELDS AND DISCIPLINES		TOTL STDNT USE, COURSEWK **** UNDGR AND GRAD ****				USE BY FACULTY AND STAFF				***** TOTAL *****	MODE/TYPE OF INSTR USE					C O D E	OTHR COMP	
						FAC RESRCH		*** OTHER ***										
		COURSES	STDNTS	THOUS$	RESRCH	SPON	N-SPON	SFT-DV	MISC		PROB SOLV	SIMUL	CAT	CAI	CMI		ON CAMP	OFF CAMP
ENGINEERING		99	2257	0	0	0	0	0	0	0	4	3	0	0	0	0-	3	3
																1-	1	1
	INSTL:	4	4	0	0	0	0	0	0	0	4	3	0	0	0	2-	0	0
	INST:	3	3	0	0	0	0	0	0	0	3	3	0	0	0			
	(NUMBER REPORTING PER CATEGORY)																	
ENVIRONMENTAL AND LIFE SCIENCES		28	749	0	0	0	0	0	0	0	3	0	0	0	0	0-	3	2
																1-	0	1
	INSTL:	3	3	0	0	0	0	0	0	0	3	0	0	0	0	2-	0	0
	INST:	3	3	0	0	0	0	0	0	0	3	0	0	0	0			
	(NUMBER REPORTING PER CATEGORY)																	
COMPUTER SCIENCES		26	854	0	0	0	0	0	0	0	3	2	0	0	0	0-	2	2
																1-	1	1
	INSTL:	3	3	0	0	0	0	0	0	0	3	2	0	0	0	2-	0	0
	INST:	2	2	0	0	0	0	0	0	0	2	2	0	0	0			
	(NUMBER REPORTING PER CATEGORY)																	
MATHEMATICS AND STATISTICS		57	4816	0	0	0	0	0	0	0	3	0	0	0	0	0-	3	3
																1-	0	0
	INSTL:	3	3	0	0	0	0	0	0	0	3	0	0	0	0	2-	0	0
	INST:	3	3	0	0	0	0	0	0	0	3	0	0	0	0			
	(NUMBER REPORTING PER CATEGCRY)																	
PHYSICAL SCIENCES		17	1199	0	0	0	0	0	0	0	4	1	0	0	0	0-	4	4
																1-	0	0
	INSTL:	4	4	0	0	0	0	0	0	0	4	1	0	0	0	2-	0	0
	INST:	3	3	0	0	0	0	0	0	0	3	1	0	0	0			
	(NUMBER REPORTING PER CATEGCRY)																	
PSYCHOLOGY		17	925	0	0	0	0	0	0	0	3	0	1	0	0	0-	3	3
																1-	0	0
	INSTL:	3	3	0	0	0	0	0	0	0	3	0	1	0	0	2-	0	0
	INST:	3	3	0	0	0	0	0	0	0	3	0	1	0	0			
	(NUMBER REPORTING PER CATEGORY)																	
SOCIAL SCIENCES		28	1169	0	0	0	0	0	0	0	3	1	1	0	0	0-	3	3
																1-	0	0
	INSTL:	3	3	0	0	0	0	0	0	0	3	1	1	0	0	2-	0	0
	INST:	3	3	0	0	0	0	0	0	0	3	1	1	0	0			
	(NUMBER REPORTING PER CATEGORY)																	
EDUCATION		10	410	0	0	0	0	0	0	0	2	0	0	0	0	0-	2	2
																1-	0	0
	INSTL:	2	2	0	0	0	0	0	0	0	2	0	0	0	0	2-	0	0
	INST:	2	2	0	0	0	0	0	0	0	2	0	0	0	0			
	(NUMBER REPORTING PER CATEGORY)																	
BUSINESS AND COMMERCE		85	5511	0	0	0	0	0	0	0	2	2	0	0	0	0-	2	2
																1-	0	0
	INSTL:	2	2	0	0	0	0	0	0	0	2	2	0	0	0	2-	0	0
	INST:	2	2	0	0	0	0	0	0	0	2	2	0	0	0			
	(NUMBER REPORTING PER CATEGORY)																	
ALL OTHER		37	1232	0	0	0	0	0	0	0	1	0	0	0	0	0-	2	2
																1-	0	0
	INSTL:	2	2	0	0	0	0	0	0	0	1	0	0	0	0	2-	0	0
	INST:	2	2	0	0	0	0	0	0	0	1	0	0	0	0			
	(NUMBER REPORTING PER CATEGCRY)																	

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     INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                          CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                                       UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                              PAGE VIII-27

                                                   SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

     GROUP (PUBLIC: DOCTORATE:500-2499    )

           TOTAL NUMBER OF INSTITUTIONS             =   28      TOTAL NUMBER OF INSTALLATIONS REPORTED       =   23
           TOTAL NUMBER OF INSTITUTIONS REPORTING =   18      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =   18

 USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT    2;   COLLEGE OR UNIV.    4;   COMMERCIAL    0

                                                                                   * LOWEST LEVEL OF RECORD KEEPING *
                        * INSTALLATION FUNCTION *                                     SCHOOL             COURSE    COURSES   INDIVIDUAL
                        NETWORK   NETWORK    LOCAL                   NO                OR COL     DEPT     NUMBER    BY SECT    STUDENTS
                         ONLY     & LOCAL    ONLY                 RECORDS   CAMPUS

            INSTL:         1         7          9                     4        1         2         5         1         1          3
            INST:          1         7          6                     3        1         2         5         1         1          3
            (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS       TOTL STDNT USE, COURSEWK  USE BY FACULTY AND STAFF            *****  MODE/TYPE OF INSTR USE     C  OTHR COMP
 AND DISCIPLINES    **** UNDGR AND GRAD ****    FAC RESRCH  *** OTHER ***           TOTAL  PROB                       D   ON   OFF
                   COURSES STDNTS THOUS$  RESRCH      SPON N-SPON SFT-DV   MISC     *****   SOLV SIMUL  CAT  CAI  CHI E   CAMP  CAMP

ENGINEERING             19    479     43      10         2      5      0      0        60      3     2    1    1    0 0-     8     7
                                                                                                                      1-     1     2
            INSTL:       2      2      2       1         1      1      0      0         2      3     2    1    1    0 2-     0     0
            INST:        2      2      2       1         1      1      0      0         2      3     2    1    1    0
            (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND       40   2619    183      29        90     30     17      1       350      5     3    5    5    2 0-     4     4
 LIFE SCIENCES                                                                                                        1-     3     3
            INSTL:       5      6      6       4         6      4      3      1         6      5     3    5    5    2 2-     0     0
            INST:        5      6      6       4         6      4      3      1         6      5     3    5    5    2
            (NUMBER REPORTING PER CATEGORY)

COMPUTER                22    535     35       8         0      2      0      0        45      3     0    1    1    0 0-     3     2
 SCIENCES                                                                                                             1-     0     1
            INSTL:       2      2      1       1         0      1      0      0         1      3     0    1    1    0 2-     0     0
            INST:        2      2      1       1         0      1      0      0         1      3     0    1    1    0
            (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND          7    351     43       7        18     11      0      0        79      7     4    2    1    0 0-     6     4
 STATISTICS                                                                                                           1-     1     3
            INSTL:       4      4      4       2         4      3      0      0         5      7     4    2    1    0 2-     0     0
            INST:        4      4      4       2         4      3      0      0         5      7     4    2    1    0
            (NUMBER REPORTING PER CATEGORY)

PHYSICAL                17     77      7      70        46     58      0      0       181      4     2    1    1    0 0-     3     1
 SCIENCES                                                                                                             1-     1     3
            INSTL:       2      3      2       2         3      2      0      0         3      4     2    1    1    0 2-     0     0
            INST:        2      3      2       2         3      2      0      0         3      4     2    1    1    0
            (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY               0      0      1       0         0      0      0      0         1      1     0    1    0    0 0-     0     1
                                                                                                                      1-     1     0
            INSTL:       0      0      1       0         0      0      0      0         1      1     0    1    0    0 2-     0     0
            INST:        0      0      1       0         0      0      0      0         1      1     0    1    0    0
            (NUMBER REPORTING PER CATEGORY)

SOCIAL                   1    250     25       3         4      2      0      0        34      2     1    1    0    0 0-     1     1
 SCIENCES                                                                                                             1-     1     1
            INSTL:       1      1      1       1         2      1      0      0         2      2     1    1    0    0 2-     0     0
            INST:        1      1      1       1         2      1      0      0         2      2     1    1    0    0
            (NUMBER REPORTING PER CATEGORY)

EDUCATION                0      0      0       0         6      0      0      0         6      1     0    1    0    0 0-     0     1
                                                                                                                      1-     1     0
            INSTL:       0      0      0       0         1      0      0      0         1      1     0    1    0    0 2-     0     0
            INST:        0      0      0       0         1      0      0      0         1      1     0    1    0    0
            (NUMBER REPORTING PER CATEGORY)

BUSINESS AND             0      0      0       0         0      0      0      0         0      1     1    1    1    0 0-     0     1
 COMMERCE                                                                                                             1-     1     0
            INSTL:       0      0      0       0         0      0      0      0         0      1     1    1    1    0 2-     0     0
            INST:        0      0      0       0         0      0      0      0         0      1     1    1    1    0
            (NUMBER REPORTING PER CATEGORY)

ALL OTHER               14    195     16       0        50      1      1      1        69      2     0    2    1    0 0-     2     1
                                                                                                                      1-     1     2
            INSTL:       2      2      2       0         2      1      1      1         3      2     0    2    1    0 2-     0     0
            INST:        2      2      2       0         2      1      1      1         3      2     0    2    1    0
            (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                        UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                   SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

   GROUP (PUBLIC: DOCTCRATE:2500-9999  )

        TOTAL NUMBER OF INSTITUTIONS            =   43      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   45
        TOTAL NUMBER OF INSTITUTIONS REPORTING =   34      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL   =   32

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. CR NCN PROFIT    2:   COLLEGE OR UNIV.    3:   COMMERCIAL    0

                    * INSTALLATION FUNCTION *                                  * LOWEST LEVEL OF RECORC KEEPING *
                    NETWORK   NETWORK    LOCAL                 NO                 SCHOOL              COURSE    COURSES   INDIVIDUAL
                     ONLY     & LOCAL    CNLY               RECORDS    CAMPUS    OR COL      DEPT     NUMBER    BY SECT    STUDENTS

              INSTL:    0        14        19                   5          0         1         11         3          3          12
              INST:     0        14        17                   5          0         1         11         3          3          12
              (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS        TOTL STDNT USE, COURSEWK        USE BY FACULTY AND STAFF       *****    MODE/TYPE CF INSTR USE      C   OTHR COMP
 AND DISCIPLINES       **** UNDGR AND GRAD ****        FAC RESRCH  *** OTHER ***      TOTAL    PROB                        D    ON    OFF
                     COURSES STDNTS THOUS$ RESRCH      SPON  .N-SPUN SFT-DV  MISC     *****    SOLV SIMUL  CAT  CAI  CMI   E   CAMP CAMP

ENGINEERING              485  11597    699     54       100    478      2      0      1333      14    12    1    1    0  0-     7   13
                                                                                                                        1-    10    4
              INSTL:      12     13     11      4         7      9      2      0        11      14    12    1    1    0  2-     1    1
              INST:       12     13     11      4         7      9      2      0        11      14    12    1    1    0
              (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND        263   5551    117     48       372    230     29      0       796      13     7    3    4    2  0-    11   14
 LIFE SCIENCES                                                                                                          1-     7    4
              INSTL:      16     14     14      4        10     11      3      0        15      13     7    3    4    2  2-     1    1
              INST:       16     14     14      4        10     11      3      0        15      13     7    3    4    2
              (NUMBER REPORTING PER CATEGORY)

COMPUTER                 346  12048    734     51         8     66      6      0       865      17    10    5    3    4  0-    12   19
 SCIENCES                                                                                                               1-     8    2
              INSTL:      19     16     14      5         3     12      4      0        14      17    10    5    3    4  2-     0    0
              INST:       18     15     13      4         3     12      4      0        13      16    10    5    3    4
              (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND          132   2449     83      6        12     21      2      0       124      17     7    2    2    0  0-    17   19
 STATISTICS                                                                                                             1-     3    1
              INSTL:      18     15     13      2         5      6      2      0        13      17     7    2    2    0  2-     0    0
              INST:       18     15     13      2         5      6      2      0        13      17     7    2    2    0
              (NUMBER REPORTING PER CATEGORY)

PHYSICAL                 143   2988    212     38       147    759      2      0      1158      15     7    1    3    1  0-    16   19
 SCIENCES                                                                                                               1-     4    1
              INSTL:      17     14     13      3         8     12      2      0        15      15     7    1    3    1  2-     1    1
              INST:       17     14     13      3         8     12      2      0        15      15     7    1    3    1
              (NUMBER REPORTING PER CATEGORY)

PSYCHOLCGY                69   1227     58     10         6     51      1      0       126      12     2    1    2    1  0-    12   16
                                                                                                                        1-     4    0
              INSTL:      12     10      7      4         3      9      1      0        11      12     2    1    2    1  2-     0    0
              INST:       12     10      7      4         3      9      1      0        11      12     2    1    2    1
              (NUMBER REPORTING PER CATEGCRY)

SOCIAL                   113   1953    101      5        69     82      0      0       257      13     6    2    3    0  0-    17   17
 SCIENCES                                                                                                               1-     1    1
              INSTL:      15     14     13      4         8     10      0      0        15      13     6    2    3    0  2-     1    1
              INST:       15     14     13      4         8     10      0      0        15      13     6    2    3    0
              (NUMBER REPORTING PER CATEGORY)

EDUCATION                 62    818     34      2         8     26      2      0        72      12     2    1    0    0  0-    18   18
                                                                                                                        1-     0    0
              INSTL:      15     13      8      2         4      5      1      0        12      12     2    1    0    0  2-     0    0
              INST:       15     13      8      2         4      5      1      0        12      12     2    1    0    0
              (NUMBER REPORTING PER CATEGORY)

BUSINESS AND             145   5914    238      3        12     50      0      0       311      13    11    2    1    1  0-    15   15
 COMMERCE                                                                                                               1-     1    1
              INSTL:      14     13     12      2         4      9      0      0        12      13    11    2    1    1  2-     1    1
              INST:       14     13     12      2         4      9      0      0        12      13    11    2    1    1
              (NUMBER REPORTING PER CATEGORY)

ALL OTHER                 86   2133    134     24        53    310    104    144       769       8     3    3    1    0  0-    14   13
                                                                                                                        1-     1    2
              INSTL:      10      9      6      2         3      8      1      1        12       8     3    3    1    0  2-     1    1
              INST:       10      9      6      2         3      8      1      1        12       8     3    3    1    0
              (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                  CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                             UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                              PAGE VIII-29

                                   SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

    GROUP (PUBLIC: DOCTORATE:10000-19999)

         TOTAL NUMBER OF INSTITUTIONS             =  63      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   76
         TOTAL NUMBER OF INSTITUTIONS REPORTING = 47      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =   40

 USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT    4:   COLLEGE OR UNIV.    5:   COMMERCIAL    0

                   * INSTALLATION FUNCTION *                                    * LOWEST LEVEL OF RECORD KEEPING *
                  NETWORK   NETWORK    LOCAL                    NO                 SCHOOL              COURSE     COURSES    INDIVIDUAL
                   ONLY     & LOCAL     ONLY                  RECORDS    CAMPUS    OR COL      DEPT     NUMBER     BY SECT     STUDENTS

            INSTL:   5         19         36                     16          2         2          17        5          3           11
            INST:    5         18         27                     11          2         2          16        5          3           11
            (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS      TOTL STDNT USE, COURSEWK        USE BY FACULTY AND STAFF        *****     MODE/TYPE OF INSTR USE      C   OTHR COMP
 AND DISCIPLINES     **** UNDGR AND GRAD ****        FAC RESRCH  *** OTHER ***       TOTAL    PROB                         O    ON   OFF
                   COURSES STDNTS THOUS$ RESRCH      SPON  N-SPON SFT-DV  MISC       *****    SOLV SIMUL  CAT   CAI   CMI  E    CAMP CAMP

 ENGINEERING          1264  26945   1272    257       796    594     39    136        3094     24    17     2     2     0  0-    20   34
                                                                                                                           1-    22    6
            INSTL:    28      25     23      15        18     20      8      5          27     24    17     2     2     0  2-     0    2
            INST:     24      22     21      13        15     18      8      5          23     20    16     2     2     0
            (NUMBER REPORTING PER CATEGORY)

 ENVIRONMENTAL AND    414  11281    445    255       512    403    128     24        1847     30    14     4     8     0  0-    25   34
  LIFE SCIENCES                                                                                                            1-    13    4
            INSTL:    33      29     27      21        17     27      9      4          31     30    14     4     8     0  2-     2    2
            INST:     27      24     25      20        15     24      8      4          27     24    12     4     6     0
            (NUMBER REPORTING PER CATEGORY)

 COMPUTER             1266  35496   2351    217       146    464    125     15        3318     29    21     5     9     2  0-    14   30
  SCIENCES                                                                                                                 1-    22    6
            INSTL:    36      32     29      19        13     22     12      5          31     29    21     5     9     2  2-     1    1
            INST:     31      28     26      16        11     20     11      4          27     25    19     5     9     2
            (NUMBER REPORTING PER CATEGORY)

 MATHEMATICS AND       573  19451    571     45       123    210     34    133        1136     27    14     6     5     0  0-    32   36
  STATISTICS                                                                                                               1-     6    2
            INSTL:    35      31     32      15        12     24      8      4          35     27    14     6     5     0  2-     1    1
            INST:     33      30     31      15        12     23      7      4          33     26    13     6     5     0
            (NUMBER REPORTING PER CATEGORY)

 PHYSICAL              442  11612    757    406       918   2055     27     18        4681     31    17     3     8     1  0-    29   34
  SCIENCES                                                                                                                 1-    14    7
            INSTL:    38      37     33      26        21     29      8      5          38     31    17     3     8     1  2-     0    2
            INST:     34      30     30      21        18     27      7      5          32     28    15     3     8     1
            (NUMBER REPORTING PER CATEGORY)

 PSYCHOLOGY            234   5758     89     63        31    135     17     12         347     27    11     7     4     0  0-    25   31
                                                                                                                           1-     9    2
            INSTL:    28      25     23      18         6     20      6      7          31     27    11     7     4     0  2-     0    1
            INST:     27      24     22      17         6     19      6      7          30     26    10     7     3     0
            (NUMBER REPORTING PER CATEGORY)

 SOCIAL                494  11120    320    119        60    458     27      9         992     27    10     2     4     0  0-    32   36
  SCIENCES                                                                                                                 1-     5    0
            INSTL:    34      30     27      15        11     26      7      4          33     27    10     2     4     0  2-     0    1
            INST:     33      29     27      15        11     26      6      4          32     27     9     2     4     0
            (NUMBER REPORTING PER CATEGORY)

 EDUCATION             219   5167     87     62        19    125      4     14         311     22     7     3     5     1  0-    27   27
                                                                                                                           1-     4    3
            INSTL:    26      22     23      10         7     17      3      4          26     22     7     3     5     1  2-     0    1
            INST:     26      22     23      10         7     17      3      4          26     22     7     3     5     1
            (NUMBER REPORTING PER CATEGORY)

 BUSINESS AND          681  26372    807     69        49    224     17    124        1290     24    20     3     8     3  0-    30   29
  COMMERCE                                                                                                                 1-     4    3
            INSTL:    30      26     28      11         9     27      6      7          30     24    20     3     8     3  2-     0    2
            INST:     30      26     28      11         9     27      6      7          30     24    20     3     8     3
            (NUMBER REPORTING PER CATEGORY)

 ALL OTHER             466  11476    500    133       261    420    115    897        2326     23    11     4     8     2  0-    22   24
                                                                                                                           1-     7    6
            INSTL:    24      21     23      13        12     22      6      8          31     23    11     4     8     2  2-     4    3
            INST:     23      20     22      12        12     22      6      8          30     22    11     4     8     2
            (NUMBER REPORTING PER CATEGORY)
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                                    SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

     GROUP (PUBLIC; DOCTORATE;ABOVE 20000)

            TOTAL NUMBER OF INSTITUTIONS           =   71      TOTAL NUMBER OF INSTALLATIONS REPORTED     =  203
            TOTAL NUMBER OF INSTITUTIONS REPORTING =   52      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =   48

  USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT    6;   COLLEGE OR UNIV.   17;   COMMERCIAL    0

                       * INSTALLATION FUNCTION *                                        * LOWEST LEVEL OF RECORD KEEPING *
                       NETWORK   NETWORK    LOCAL                 NO                   SCHOOL                COURSE   COURSES   INDIVIDUAL
                        ONLY     & LOCAL    ONLY               RECORDS    CAMPUS       OR COL       DEPT     NUMBER   BY SECT    STUDENTS

               INSTL:     7        54        69                   39         3            4          31        16        10         24
               INST:      6        34        22                   12         3            4          20        12        10         15
               (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS        TOTL STDNT USE, COURSEWK    USE BY FACULTY AND STAFF         *****  MODE/TYPE OF INSTR USE        C  OTHR COMP
 AND DISCIPLINES       **** UNDGR AND GRAD ****    FAC RESRCH  *** OTHER ***        TOTAL  PROB                          O    ON  OFF
                 COURSES  STDNTS THOUS$ RESRCH     SPON N-SPON SFT-DV  MISC         *****  SOLV SIMUL  CAT  CAI  CMI E    CAMP CAMP

ENGINEERING         3417   89521   8813   2666     3659   2519    158    68     17883    42    33   10   15    5 0-     51   67
                                                                                                                 1-     33   13
         INSTL:       45      43     41     30       37     31      7     5        49    42    33   10   15    5 2-      3    7
         INST:        30      29     32     25       25     27      5     5        32    27    24    9   12    5
         (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND    885   27073    663    839     2638   2645    337    94      7216    34    25    9   11    4 0-     30   38
 LIFE SCIENCES                                                                                                   1-     21   14
         INSTL:       37      37     32     23       40     32     10     6        50    34    25    9   11    4 2-      7    6
         INST:        28      26     28     21       26     27      9     6        32    24    18    9    8    4
         (NUMBER REPORTING PER CATEGORY)

COMPUTER            1702   86817   4158    462      394    794    130    22      5960    33    23    7   10    4 0-     17   34
 SCIENCES                                                                                                        1-     28    7
         INSTL:       38      35     36     23       21     26      5     3        39    33    23    7   10    4 2-      1    5
         INST:        32      31     31     22       18     26      5     3        31    26    22    7   10    4
         (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND      923   31187   1304    149      839   1008    118     9      3427    33    18   10   12    4 0-     29   35
 STATISTICS                                                                                                      1-     15    6
         INSTL:       40      38     36     23       22     29      5     2        40    33    18   10   12    4 2-      1    4
         INST:        31      31     32     22       19     27      4     2        33    27    16   10   10    4
         (NUMBER REPORTING PER CATEGORY)

PHYSICAL             498   30527   1045   5863     5354  12904    386   355     25907    37    27   15   14    5 0-     23   35
 SCIENCES                                                                                                        1-     32   19
         INSTL:       41      39     36     34       39     38     11     7        52    37    27   15   14    5 2-      3    4
         INST:        30      29     32     28       24     29      9     7        35    27    25   15   13    5
         (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY           449   15903    326    292      258    612     20    22      1530    24    13    8    6    4 0-     23   29
                                                                                                                 1-     17    5
         INSTL:       30      28     29     23       24     29      3     1        38    24    13    8    6    4 2-      1    7
         INST:        29      27     28     23       22     28      3     1        33    23    13    8    6    4
         (NUMBER REPORTING PER CATEGORY)

SOCIAL              1274   35911    982    745     1109   2143    139    14      5132    29    17    6    7    2 0-     24   26
 SCIENCES                                                                                                        1-     12    7
         INSTL:       33      30     35     23       29     28      4     2        39    29    17    6    7    2 2-      6    9
         INST:        28      27     31     22       24     26      4     2        32    25    15    6    7    2
         (NUMBER REPORTING PER CATEGORY)

EDUCATION            418   13494    385    399      447    704     55    11      2001    27    10   11   11    4 0-     28   26
                                                                                                                 1-      7    7
         INSTL:       31      28     32     22       25     27      4     3        36    27    10   11   11    4 2-      5    7
         INST:        30      27     31     22       25     27      4     3        35    26    10   11   10    4
         (NUMBER REPORTING PER CATEGORY)

BUSINESS AND        1547  102392   2130    641      281   1348     69    42      4511    31    26    7   11    5 0-     31   36
 COMMERCE                                                                                                        1-     13    6
         INSTL:       39      37     41     29       24     34      3     5        41    31    26    7   11    5 2-      2    4
         INST:        33      33     35     27       23     31      3     5        35    28    23    7   10    4
         (NUMBER REPORTING PER CATEGORY)

ALL OTHER           1257   35540   1312   1280     2576   3466    339   534      9447    27    15    6   12    6 0-     23   27
                                                                                                                 1-     17    9
         INSTL:       32      30     30     21       23     32      8     5        40    27    15    6   12    6 2-      5    9
         INST:        28      28     28     20       20     29      7     5        33    22    15    6   11    6
         (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
              CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                        UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                               SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

   GROUP (PRIVATE;ASSOCIATE;BELOW 500  )

       TOTAL NUMBER OF INSTITUTIONS              =  161     TOTAL NUMBER OF INSTALLATIONS REPORTED     =    9
       TOTAL NUMBER OF INSTITUTIONS REPORTING =  100     TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =    9

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT    0:   COLLEGE OR UNIV.    0:   COMMERCIAL    1

                  * INSTALLATION FUNCTION *                                     * LOWEST LEVEL OF RECORD KEEPING *
                  NETWORK   NETWORK    LOCAL                NO                  SCHOOL               COURSE      COURSES    INDIVIDUAL
                   ONLY     & LOCAL     ONLY              RECORDS    CAMPUS     OR COL      DEPT     NUMBER      BY SECT     STUDENTS

            INSTL:   0          0         7                  5          0          0           0         0           0            1
            INST:    0          0         7                  5          0          0           0         0           0            1
            (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS     TOTL STDNT USE, COURSEWK        USE BY FACULTY AND STAFF         *****     MODE/TYPE OF INSTR USE     C   OTHR COMP
AND DISCIPLINES     **** UNDGR AND GRAD ****        FAC RESRCH  *** OTHER ***        TOTAL     PROB                       D    ON   OFF
                 COURSES STDNTS THOUS$ RESRCH       SPON   N-SPON SFT-DV  MISC       *****     SOLV SIMUL  CAT  CAI  CMI  E    CAMP CAMP

ENGINEERING            0      0      0      0          0      0      0      0          0        0     0     0    0    0  0-     2    2
                                                                                                                     1-     0    0
            INSTL:     0      0      0      0          0      0      0      0          0        0     0     0    0    0  2-     0    0
            INST:      0      0      0      0          0      0      0      0          0        0     0     0    0    0
            (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND      0      0      0      0          0      0      0      0          0        0     0     0    0    0  0-     0    0
 LIFE SCIENCES                                                                                                       1-     0    0
            INSTL:     0      0      0      0          0      0      0      0          0        0     0     0    0    0  2-     0    0
            INST:      0      0      0      0          0      0      0      0          0        0     0     0    0    0
            (NUMBER REPORTING PER CATEGORY)

COMPUTER              16    124      5     15          0      0      2      0         22        3     1     0    0    0  0-     4    4
 SCIENCES                                                                                                            1-     0    0
            INSTL:     4      4      3      1          0      0      1      0          3        3     1     0    0    0  2-     0    0
            INST:      4      4      3      1          0      0      1      0          3        3     1     0    0    0
            (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND        1     20      1      0          0      0      0      0          1        1     0     0    0    0  0-     1    1
 STATISTICS                                                                                                          1-     0    0
            INSTL:     1      1      1      0          0      0      0      0          1        1     0     0    0    0  2-     0    0
            INST:      1      1      1      0          0      0      0      0          1        1     0     0    0    0
            (NUMBER REPORTING PER CATEGORY)

PHYSICAL               0      0      0      0          0      0      0      0          0        0     0     0    0    0  0-     0    0
 SCIENCES                                                                                                            1-     0    0
            INSTL:     0      0      0      0          0      0      0      0          0        0     0     0    0    0  2-     0    0
            INST:      0      0      0      0          0      0      0      0          0        0     0     0    0    0
            (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY             0      0      0      0          0      0      0      0          0        0     0     0    0    0  0-     0    0
                                                                                                                     1-     0    0
            INSTL:     0      0      0      0          0      0      0      0          0        0     0     0    0    0  2-     0    0
            INST:      0      0      0      0          0      0      0      0          0        0     0     0    0    0
            (NUMBER REPORTING PER CATEGORY)

SOCIAL                 0      0      0      0          0      0      0      0          0        0     0     0    0    0  0-     0    0
 SCIENCES                                                                                                            1-     0    0
            INSTL:     0      0      0      0          0      0      0      0          0        0     0     0    0    0  2-     0    0
            INST:      0      0      0      0          0      0      0      0          0        0     0     0    0    0
            (NUMBER REPORTING PER CATEGORY)

EDUCATION              0      0      0      0          0      0      0      0          0        0     0     0    0    0  0-     0    0
                                                                                                                     1-     0    0
            INSTL:     0      0      0      0          0      0      0      0          0        0     0     0    0    0  2-     0    0
            INST:      0      0      0      0          0      0      0      0          0        0     0     0    0    0
            (NUMBER REPORTING PER CATEGORY)

BUSINESS AND           2     40      0      0          0      0      0      0          0        1     1     0    0    0  0-     1    1
 COMMERCE                                                                                                            1-     0    0
            INSTL:     1      1      0      0          0      0      0      0          0        1     1     0    0    0  2-     0    0
            INST:      1      1      0      0          0      0      0      0          0        1     1     0    0    0
            (NUMBER REPORTING PER CATEGORY)

ALL OTHER              0      0      0      0          0      0      0      0          0        0     0     0    0    0  0-     0    0
                                                                                                                     1-     0    0
            INSTL:     0      0      0      0          0      0      0      0          0        0     0     0    0    0  2-     0    0
            INST:      0      0      0      0          0      0      0      0          0        0     0     0    0    0
            (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
               CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                        UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                               PAGE VIII-32

                              SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

   GROUP (PRIVATE:ASSOCIATE:500-2499    )

       TOTAL NUMBER OF INSTITUTIONS           =   90     TOTAL NUMBER OF INSTALLATIONS REPORTED      =   18
       TOTAL NUMBER OF INSTITUTIONS REPORTING =   48     TOTAL NUMBER OF INSTITUTIONS RPTING INSTL   =   18

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT    0:   COLLEGE OR UNIV.    0:   COMMERCIAL    3

                * INSTALLATION FUNCTION *                                    * LOWEST LEVEL OF RECORD KEEPING *
                NETWORK   NETWORK    LOCAL                     NO                   SCHOOL               COURSE     COURSES    INDIVIDUAL
                 ONLY     & LOCAL    ONLY                   RECORDS    CAMPUS       OR COL      DEPT     NUMBER     BY SECT     STUDENTS

        INSTL:     0         0        10                        2         1            1          1         2           1           2
        INST:      0         0        10                        2         1            1          1         2           1           2
        (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS       TOTL STDNT USE, COURSEWK       USE BY FACULTY AND STAFF          *****    MODE/TYPE OF INSTR USE       C   OTHR COMP
 AND DISCIPLINES      **** UNDGR AND GRAD ****       FAC RESRCH  *** OTHER ***         TOTAL    PROB                         D    ON   OFF
                    COURSES STDNTS THOUS$ RESRCH     SPON  N-SPON SFT-DV  MISC         *****    SOLV SIMUL  CAT  CAI  CMI    E   CAMP CAMP

ENGINEERING             10    100      0      0        0      0      5      0             5       2    0    0    0    0  0-      5    6
                                                                                                                        1-      1    0
             INSTL:      2      2      0      0        0      0      1      0             1       2    0    0    0    0  2-      0    0
             INST:       2      2      0      0        0      0      1      0             1       2    0    0    0    0
             (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND        0      0      0      0        0      0      0      0             0       0    0    0    0    0  0-      0    0
 LIFE SCIENCES                                                                                                          1-      0    0
             INSTL:      0      0      0      0        0      0      0      0             0       0    0    0    0    0  2-      0    0
             INST:       0      0      0      0        0      0      0      0             0       0    0    0    0    0
             (NUMBER REPORTING PER CATEGORY)

COMPUTER                39    945    129      0        0      0     15      0           144       5    0    0    1    0  0-      4    5
 SCIENCES                                                                                                               1-      1    0
             INSTL:      5      5      3      0        0      0      1      0             4       5    0    0    1    0  2-      0    0
             INST:       5      5      3      0        0      0      1      0             4       5    0    0    1    0
             (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND          3     10      0      0        0      0      0      0             0       0    0    0    0    0  0-      1    1
 STATISTICS                                                                                                             1-      0    0
             INSTL:      1      1      0      0        0      0      0      0             0       0    0    0    0    0  2-      0    0
             INST:       1      1      0      0        0      0      0      0             0       0    0    0    0    0
             (NUMBER REPORTING PER CATEGORY)

PHYSICAL                 0      0      0      0        0      0      0      0             0       0    0    0    0    0  0-      0    0
 SCIENCES                                                                                                               1-      0    0
             INSTL:      0      0      0      0        0      0      0      0             0       0    0    0    0    0  2-      0    0
             INST:       0      0      0      0        0      0      0      0             0       0    0    0    0    0
             (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY               0      0      0      0        0      0      0      0             0       0    0    0    0    0  0-      0    0
                                                                                                                        1-      0    0
             INSTL:      0      0      0      0        0      0      0      0             0       0    0    0    0    0  2-      0    0
             INST:       0      0      0      0        0      0      0      0             0       0    0    0    0    0
             (NUMBER REPORTING PER CATEGORY)

SOCIAL                   0      0      0      0        0      0      0      0             0       0    0    0    0    0  0-      0    0
 SCIENCES                                                                                                               1-      0    0
             INSTL:      0      0      0      0        0      0      0      0             0       0    0    0    0    0  2-      0    0
             INST:       0      0      0      0        0      0      0      0             0       0    0    0    0    0
             (NUMBER REPORTING PER CATEGORY)

EDUCATION                0      0      0      0        0      0      0      0             0       0    0    0    0    0  0-      0    0
                                                                                                                        1-      0    0
             INSTL:      0      0      0      0        0      0      0      0             0       0    0    0    0    0  2-      0    0
             INST:       0      0      0      0        0      0      0      0             0       0    0    0    0    0
             (NUMBER REPORTING PER CATEGORY)

BUSINESS AND             7    535     25      0        0      0      0      0            25       1    0    0    0    0  0-      1    1
 COMMERCE                                                                                                               1-      0    0
             INSTL:      1      1      1      0        0      0      0      0             1       1    0    0    0    0  2-      0    0
             INST:       1      1      1      0        0      0      0      0             1       1    0    0    0    0
             (NUMBER REPORTING PER CATEGORY)

ALL OTHER                0      0      0      0        0      0      0      0             0       0    0    0    0    0  0-      0    0
                                                                                                                        1-      0    0
             INSTL:      0      0      0      0        0      0      0      0             0       0    0    0    0    0  2-      0    0
             INST:       0      0      0      0        0      0      0      0             0       0    0    0    0    0
             (NUMBER REPORTING PER CATEGORY)
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                                  SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

    GROUP (PRIVATE;ASSOCIATE;2500-9999  )

          TOTAL NUMBER OF INSTITUTIONS             =    8      TOTAL NUMBER OF INSTALLATIONS REPORTED      =    1
          TOTAL NUMBER OF INSTITUTIONS REPORTING   =    4      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL   =    1

USE OF OFF-CAMPUS COMPUTERS BY INSTL:   COOP. OR NON PROFIT    0:   COLLEGE OR UNIV.    0:   COMMERCIAL    0

                     * INSTALLATION FUNCTION *                                     * LOWEST LEVEL OF RECORD KEEPING *
                     NETWORK   NETWORK    LOCAL               NO                  SCHOOL              COURSE     COURSES    INDIVIDUAL
                      ONLY     & LOCAL    ONLY             RECORDS    CAMPUS     OR COL      DEPT     NUMBER     BY SECT     STUDENTS

               INSTL:    0         0         1                0          0          0          0          0          0           0
               INST:     0         0         1                0          0          0          0          0          0           0
               (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS          TOTL STDNT USE, COURSEWK    USE BY FACULTY AND STAFF       *****    MODE/TYPE OF INSTR USE     C   OTHR COMP
 AND DISCIPLINES         **** UNDGR AND GRAD ****    FAC RESRCH  *** OTHER ***      TOTAL    PROB                       O    ON  OFF
                        COURSES STDNTS THOUS$ RESRCH   SPON N-SPON SFT-DV  MISC    *****   SOLV SIMUL  CAT  CAI  CMI  E    CAMP CAMP

ENGINEERING                   1     50     15      0      0      0      0     0       15      1     0    0    0    0  0-      0    1
                                                                                                                    1-      1    0
               INSTL:         1      1      1      0      0      0      0     0        1      1     0    0    0    0  2-      0    0
               INST:          1      1      1      0      0      0      0     0        1      1     0    0    0    0
               (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND             0      0      0      0      0      0      0     0        0      0     0    0    0    0  0-      0    0
 LIFE SCIENCES                                                                                                      1-      0    0
               INSTL:         0      0      0      0      0      0      0     0        0      0     0    0    0    0  2-      0    0
               INST:          0      0      0      0      0      0      0     0        0      0     0    0    0    0
               (NUMBER REPORTING PER CATEGORY)

COMPUTER                      0      0      0      0      0      0      0     0        0      0     0    0    0    0  0-      0    0
 SCIENCES                                                                                                           1-      0    0
               INSTL:         0      0      0      0      0      0      0     0        0      0     0    0    0    0  2-      0    0
               INST:          0      0      0      0      0      0      0     0        0      0     0    0    0    0
               (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND               1     15      2      0      0      0      0     0        2      0     0    0    1    0  0-      1    0
 STATISTICS                                                                                                         1-      0    1
               INSTL:         1      1      1      0      0      0      0     0        1      0     0    0    1    0  2-      0    0
               INST:          1      1      1      0      0      0      0     0        1      0     0    0    1    0
               (NUMBER REPORTING PER CATEGORY)

PHYSICAL                      0      0      0      0      0      0      0     0        0      0     0    0    0    0  0-      0    0
 SCIENCES                                                                                                           1-      0    0
               INSTL:         0      0      0      0      0      0      0     0        0      0     0    0    0    0  2-      0    0
               INST:          0      0      0      0      0      0      0     0        0      0     0    0    0    0
               (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY                    0      0      0      0      0      0      0     0        0      0     0    0    0    0  0-      0    0
                                                                                                                    1-      0    0
               INSTL:         0      0      0      0      0      0      0     0        0      0     0    0    0    0  2-      0    0
               INST:          0      0      0      0      0      0      0     0        0      0     0    0    0    0
               (NUMBER REPORTING PER CATEGORY)

SOCIAL                        0      0      0      0      0      0      0     0        0      0     0    0    0    0  0-      0    0
 SCIENCES                                                                                                           1-      0    0
               INSTL:         0      0      0      0      0      0      0     0        0      0     0    0    0    0  2-      0    0
               INST:          0      0      0      0      0      0      0     0        0      0     0    0    0    0
               (NUMBER REPORTING PER CATEGORY)

EDUCATION                     0      0      0      0      0      0      0     0        0      0     0    0    0    0  0-      0    0
                                                                                                                    1-      0    0
               INSTL:         0      0      0      0      0      0      0     0        0      0     0    0    0    0  2-      0    0
               INST:          0      0      0      0      0      0      0     0        0      0     0    0    0    0
               (NUMBER REPORTING PER CATEGORY)

BUSINESS AND                  1    250     25      0      0      0      0     0       25      1     0    0    0    0  0-      0    1
 COMMERCE                                                                                                           1-      1    0
               INSTL:         1      1      1      0      0      0      0     0        1      1     0    0    0    0  2-      0    0
               INST:          1      1      1      0      0      0      0     0        1      1     0    0    0    0
               (NUMBER REPORTING PER CATEGORY)

ALL OTHER                     0      0      0      0      0      0      0     0        0      0     0    0    0    0  0-      0    0
                                                                                                                    1-      0    0
               INSTL:         0      0      0      0      0      0      0     0        0      0     0    0    0    0  2-      0    0
               INST:          0      0      0      0      0      0      0     0        0      0     0    0    0    0
               (NUMBER REPORTING PER CATEGORY)
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                              SUMMARY OF INSTRUCTICNAL ANC RESEARCH USE

   GROUP (PRIVATF:RACHELORS:BELOW 500  )

         TOTAL NUMBER CF INSTITUTIONS              =  222     TOTAL NUMBER OF INSTALLATIONS REPORTED      =   30
         TOTAL NUMBER OF INSTITUTIONS REPORTING =  117     TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =   29

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT    0:   COLLEGE OR UNIV.    1:   COMMERCIAL    5

                   * INSTALLATION FUNCTION *                                        * LOWEST LEVEL OF RECORD KEEPING *
                   NETWORK   NETWORK    LOCAL                      NO                  SCHOOL                  COURSE     COURSES   INDIVIDUAL
                    ONLY     & LOCAL    ONLY                    RECORDS    CAMPUS     OR COL      DEPT        NUMBER     BY SECT    STUDENTS

             INSTL:    1         1        15                       10         2          0           1           1           0           1
             INST:     1         1        15                       10         2          0           1           1           0           1
             (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS       TOTL STDNT USE, COURSEWK        USE BY FACULTY AND STAFF         *****    MODE/TYPE OF INSTR USE       C    OTHR COMP
AND DISCIPLINES       **** UNDGR AND GRAD ****        FAC RESRCH  *** OTHER ***        TOTAL   PROB                          D     CN    OFF
                  COURSES STDNTS THOUS$ RESRCH        SPON  N-SPON SFT-DV  MISC        *****   SOLV SIMUL  CAT  CAI  CMI     E    CAMP  CAMP

ENGINEERING           12    290     15      0            0      0      3      0           18      2     1    0    1    0   0-      9     9
                                                                                                                        1-      0     0
             INSTL:    3      3      2      0            0      0      1      0            2      2     1    0    1    0   2-      0     0
             INST:     3      3      2      0            0      0      1      0            2      2     1    0    1    0
             (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND      2     30      0      0            0      0      0      0            0      0     0    0    0    0   0-      1     1
 LIFE SCIENCES                                                                                                          1-      0     0
             INSTL:    1      1      0      0            0      0      0      0            0      0     0    0    0    0   2-      0     0
             INST:     1      1      0      0            0      0      0      0            0      0     0    0    0    0
             (NUMBER REPORTING PER CATEGORY)

COMPUTER              21    605     20      0            0      1      6      0           27      4     0    0    1    0   0-      6     6
 SCIENCES                                                                                                               1-      0     0
             INSTL:    6      6      4      0            0      1      1      0            4      4     0    0    1    0   2-      0     0
             INST:     6      6      4      0            0      1      1      0            4      4     0    0    1    0
             (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND       17    390      1      0            0      0      0      0            1      4     2    0    1    0   0-      5     5
 STATISTICS                                                                                                             1-      0     0
             INSTL:    5      5      1      0            0      0      0      0            1      4     2    0    1    0   2-      0     0
             INST:     5      5      1      0            0      0      0      0            1      4     2    0    1    0
             (NUMBER REPORTING PER CATEGORY)

PHYSICAL               5     55      1      0            1      0      0      0            2      2     2    0    1    0   0-      2     2
 SCIENCES                                                                                                               1-      0     0
             INSTL:    2      2      1      0            1      0      0      0            1      2     2    0    1    0   2-      0     0
             INST:     2      2      1      0            1      0      0      0            1      2     2    0    1    0
             (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY             0      0      0      0            0      1      0      0            1      0     0    0    0    0   0-      1     1
                                                                                                                        1-      0     0
             INSTL:    0      0      0      0            0      1      0      0            1      0     0    0    0    0   2-      0     0
             INST:     0      0      0      0            0      1      0      0            1      0     0    0    0    0
             (NUMBER REPORTING PER CATEGORY)

SOCIAL                 3    100      0      0            0      0      0      0            0      0     0    0    1    0   0-      1     1
 SCIENCES                                                                                                               1-      0     0
             INSTL:    1      1      0      0            0      0      0      0            0      0     0    0    1    0   2-      0     0
             INST:     1      1      0      0            0      0      0      0            0      0     0    0    1    0
             (NUMBER REPORTING PER CATEGORY)

EDUCATION              1     25      0      0            0      0      0      0            0      0     0    0    1    0   0-      1     1
                                                                                                                        1-      0     0
             INSTL:    1      1      0      0            0      0      0      0            0      0     0    0    1    0   2-      0     0
             INST:     1      1      0      0            0      0      0      0            0      0     0    0    1    0
             (NUMBER REPORTING PER CATEGORY)

BUSINESS AND           1     30      1      0            0      0      0      0            1      0     0    0    0    0   0-      1     1
 COMMERCE                                                                                                               1-      0     0
             INSTL:    1      1      1      0            0      0      0      0            1      0     0    0    0    0   2-      0     0
             INST:     1      1      1      0            0      0      0      0            1      0     0    0    0    0
             (NUMBER REPORTING PER CATEGORY)

ALL CTHER              1     50      0      0            0      0      0      0            0      0     0    0    1    0   0-      1     1
                                                                                                                        1-      0     0
             INSTL:    1      1      0      0            0      0      0      0            0      0     0    0    1    0   2-      0     0
             INST:     1      1      0      0            0      0      0      0            0      0     0    0    1    0
             (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                         CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSCURI-ROLLA
                                    UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                SUMMARY OF INSTRUCTICNAL ANC RESEARCH USE

    GROUP (PRIVATE;BACHELORS;500-2499    )

          TOTAL NUMBER CF INSTITUTIONS              =  458      TOTAL NUMBER OF INSTALLATICNS REPORTED      =  207
          TOTAL NUMBER OF INSTITUTIONS REPORTING =  272      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL   =  194

 USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. CR NON PROFIT   13;   COLLEGE OR UNIV.   23;   COMMERCIAL   11

                     * INSTALLATION FUNCTION *                              * LOWEST LEVEL OF RECORD KEEPING *
                     NETWORK   NETWORK    LOCAL                    NO                SCHOCL               COURSE    COURSES     INDIVIDUAL
                      ONLY     & LCCAL     ONLY                  RECORDS   CAMPUS    OR COL     DEPT      NUMBER    BY SECT      STUDENTS

               INSTL:   12        10        132                    77        14        8         26         10         2            16
               INST:    12        10        129                    74        14        8         26         10         2            16
               (NUMBER REPORTING PER CATEC RY)

ACADEMIC FIELDS      TOTL STDNT USE, COURSEWK      USE BY FACULTY AND STAFF       *****     MODE/TYPE OF INSTR USE    C   OTHR COMP
 AND DISCIPLINES     **** UNDGR AND GRAD ****      FAC RESRCH  *** OTHER ***      TOTAL   PROB                        D    ON   OFF
                   COURSES STDNTS THOUS$ RESRCH    SPON  N-SPON SFT-DV  MISC      *****   SOLV SIMUL  CAT  CAI  CMI   E   CAMP CAMP

 ENGINEERING           36    354      7      0        3      0      0      0        10      6     2    0    1    0  0-    56   54
                                                                                                                    1-     0    1
               INSTL:   6      6      2      0        1      0      0      0         3      6     2    0    1    0  2-     0    1
               INST:    6      6      2      0        1      0      0      0         3      6     2    0    1    0
               (NUMBER REPORTING PER CATEGCRY)

 ENVIRONMENTAL AND     49   2267     18      0        0      0     21      2        41     12    16    0    1    1  0-    27   23
  LIFE SCIENCES                                                                                                     1-     1    3
               INSTL:  26     23      5      0        0      0      2      2         9     12    16    0    1    1  2-     1    3
               INST:   26     23      5      0        0      0      2      2         9     12    16    0    1    1
               (NUMBER REPORTING PER CATEGCRY)

 COMPUTER             295   6571   1751      8        0     12      5      7      1783     45    18    6    8    5  0-    63   57
  SCIENCES                                                                                                          1-     5   10
               INSTL:  66     64     28      2        0      6      5      2        30     45    18    6    8    5  2-     1    2
               INST:   66     64     28      2        0      6      5      2        30     45    18    6    8    5
               (NUMBER REPORTING PER CATEGORY)

 MATHEMATICS AND      281   7605    134      2        8      8     13      7       172     63    26    3   13    6  0-    85   76
  STATISTICS                                                                                                        1-     6   12
               INSTL:  88     82     25      2        2      7      4      3        30     63    26    3   13    6  2-     1    4
               INST:   88     82     25      2        2      7      4      3        30     63    26    3   13    6
               (NUMBER REPORTING PER CATEGORY)

 PHYSICAL             191   3181     37      2        1     19      2     15        76     34    18    6    7    3  0-    46   47
  SCIENCES                                                                                                          1-     5    2
               INSTL:  49     43     11      2        1      6      2      3        14     34    18    6    7    3  2-     1    3
               INST:   49     43     11      2        1      6      2      3        14     34    18    6    7    3
               (NUMBER REPORTING PER CATEGORY)

 PSYCHOLOGY            66   1712    116      0        2      6      1      3       128     19     6    1    2    2  0-    30   27
                                                                                                                    1-     4    6
               INSTL:  28     25      7      0        1      5      1      3        13     19     6    1    2    2  2-     0    1
               INST:   28     25      7      0        1      5      1      3        13     19     6    1    2    2
               (NUMBER REPORTING PER CATEGORY)

 SOCIAL               117   1825     25      2        6      3      6      6        48     23     8    1    2    1  0-    36   29
  SCIENCES                                                                                                          1-     2    7
               INSTL:  34     32      9      1        3      2      2      3        15     23     8    1    2    1  2-     2    4
               INST:   34     32      9      1        3      2      2      3        15     23     8    1    2    1
               (NUMBER REPORTING PER CATEGORY)

 EDUCATION             10    573      0      0        0      0      3      0         3      2     0    2    1    0  0-     9    8
                                                                                                                    1-     0    0
               INSTL:   7      7      0      0        0      0      1      0         1      2     0    2    1    0  2-     0    1
               INST:    7      7      0      0        0      0      1      0         1      2     0    2    1    0
               (NUMBER REPORTING PER CATEGORY)

 BUSINESS AND         108   3443     65      0        0      0     13      1        79     29    17    4    4    1  0-    46   44
  COMMERCE                                                                                                          1-     3    3
               INSTL:  48     45     17      0        0      0      4      1        19     29    17    4    4    1  2-     1    3
               INST:   48     45     17      0        0      0      4      1        19     29    17    4    4    1
               (NUMBER REPORTING PER CATEGORY)

 ALL OTHER             50   2284     75     10        0      3      8      1        97     12     3    3    3    2  0-    17   17
                                                                                                                    1-     4    3
               INSTL:  15     19      9      2        0      3      3      1        11     12     3    3    3    2  2-     1    2
               INST:   15     19      8      2        0      3      3      1        11     12     3    3    3    2
               (NUMBER REPORTING PER CATEGCRY)
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INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, ANC INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
              CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                        UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                  PAGE VIII-36

                              SUMMARY OF INSTRUCTICNAL AND RESEARCH USE

    GROUP (PRIVATE:BACHELORS:2500-9999  )

          TOTAL NUMBER OF INSTITUTIONS             =   24      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   11
          TOTAL NUMBER OF INSTITUTIONS REPORTING =   11      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =   10

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. CR NON PROFIT    1:   COLLEGE OR UNIV.    0:   COMMERCIAL    0

                      * INSTALLATION FUNCTION *                              * LOWEST LEVEL OF RECORC KEEPING *
                      NETWORK   NETWORK    LOCAL               NO               SCHOOL              COURSE    COURSES    INDIVIDUAL
                       ONLY     & LOCAL     CNLY            RECORDS   CAMPUS    OR COL     DEPT     NUMBER    BY SECT     STUDENTS

               INSTL:    0         1         8                  4        2         1         0         2         0            0
               INST:     0         1         8                  4        2         1         0         2         0            0
               (NUMBER REPORTING BFR CATEGORY)

ACADEMIC FIELDS       TOTL STCNT USE, COURSEWK         USE BY FACULTY AND STAFF       *****     MODE/TYPE CF INSTR USE        C   OTHR COMP
 AND DISCIPLINES      **** UNDGR AND GRAD ****         FAC RESRCH  *** OTHER ***      TOTAL    PROB                            D    ON   OFF
                   COURSES STDNTS THOUS$ RESRCH        SPON  N-SPON SFT-DV  MISC      *****    SOLV SIMUL  CAT   CAI   CMI    E   CAMP CAMP

ENGINEERING            4     25      3      0           0      1      0      1          5       1     1     0     1     0   0-     1    2
                                                                                                                          1-     1    0
               INSTL:  1      1      1      0           0      1      0      1          1       1     1     0     1     0   2-     0    0
               INST:   1      1      1      0           0      1      0      1          1       1     1     0     1     0
               (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND      1     10      1      0           0      0      0      0          1       0     1     0     0     0   0-     1    1
 LIFE SCIENCES                                                                                                            1-     0    0
               INSTL:  1      1      1      0           0      0      0      0          1       0     1     0     0     0   2-     0    0
               INST:   1      1      1      0           0      0      0      0          1       0     1     0     0     0
               (NUMBER REPORTING PER CATEGCRY)

COMPUTER              80   1779    157      0           5      0      1      0        163       4     1     0     0     0   0-     4    6
 SCIENCES                                                                                                                 1-     2    0
               INSTL:  6      6      3      0           1      0      1      0          3       4     1     0     0     0   2-     0    0
               INST:   6      6      3      0           1      0      1      0          3       4     1     0     0     0
               (NUMBER REPORTING PER CATEGCRY)

MATHEMATICS AND       13    302     34      0           1      0      0      0         35       2     1     0     1     0   0-     3    3
 STATISTICS                                                                                                               1-     1    1
               INSTL:  4      4      3      0           1      0      0      0          3       2     1     0     1     0   2-     0    0
               INST:   4      4      3      0           1      0      0      0          3       2     1     0     1     0
               (NUMBER REPCRTING PER CATEGORY)

PHYSICAL               6    135      1      0           0      1      1      0          3       2     1     0     1     0   0-     2    2
 SCIENCES                                                                                                                 1-     1    1
               INSTL:  3      3      1      0           0      1      1      0          1       2     1     0     1     0   2-     0    0
               INST:   3      3      1      0           0      1      1      0          1       2     1     0     1     0
               (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY             3     49      7      0           0      0      1      0          8       2     0     0     1     0   0-     2    2
                                                                                                                          1-     0    0
               INSTL:  2      1      1      0           0      0      1      0          2       2     0     0     1     0   2-     0    0
               INST:   2      1      1      0           0      0      1      0          2       2     0     0     1     0
               (NUMBER REPORTING PER CATEGORY)

SOCIAL                 0      0      0      0           0      0      0      0          0       0     0     0     0     0   0-     0    0
 SCIENCES                                                                                                                 1-     0    0
               INSTL:  0      0      0      0           0      0      0      0          0       0     0     0     0     0   2-     0    0
               INST:   0      0      0      0           0      0      0      0          0       0     0     0     0     0
               (NUMBER REPORTING PER CATEGORY)

EDUCATION              1     20      1      0           0      0      1      0          2       1     1     0     1     0   0-     1    1
                                                                                                                          1-     0    0
               INSTL:  1      1      1      0           0      0      1      0          1       1     1     0     1     0   2-     0    0
               INST:   1      1      1      0           0      0      1      0          1       1     1     0     1     0
               (NUMBER REPORTING PER CATEGORY)

BUSINESS AND          20   1142     73      0           1      2      1      1         78       3     2     0     2     0   0-     3    5
 COMMERCE                                                                                                                 1-     2    0
               INSTL:  5      5      3      0           1      1      1      1          3       3     2     0     2     0   2-     0    0
               INST:   5      5      3      0           1      1      1      1          3       3     2     0     2     0
               (NUMBER REPORTING PER CATEGORY)

ALL OTHER              5    200      0      0           0      0     10      2         12       0     0     0     0     0   0-     2    1
                                                                                                                          1-     0    1
               INSTL:  1      1      0      0           0      0      1      1          1       0     0     0     0     0   2-     0    0
               INST:   1      1      0      0           0      0      1      1          1       0     0     0     0     0
               (NUMBER REPORTING PER CATEGORY)
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                              SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

    GROUP (PRIVATE:MASTERS:  BELOW 500  )

         TOTAL NUMBER OF INSTITUTIONS             =  137      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   19
         TOTAL NUMBER OF INSTITUTIONS REPORTING =   90      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL   =   17

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT    0;   COLLEGE OR UNIV.    1;   COMMERCIAL    0

                  * INSTALLATION FUNCTION *                                        * LOWEST LEVEL OF RECORD KEEPING *
                  NETWORK   NETWORK    LOCAL                  NO                   SCHOOL             COURSE     COURSES    INDIVIDUAL
                   ONLY    & LOCAL      ONLY               RECORDS    CAMPUS      OR COL     DEPT     NUMBER     BY SECT     STUDENTS

          INSTL:     1         1          9                    6          0           0          3         1          0            1
          INST:      1         1          9                    6          0           0          3         1          0            1
          (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS      TOTL STDNT USE, COURSEWK       USE BY FACULTY AND STAFF        *****     MODE/TYPE OF INSTR USE        C    OTHR COMP
AND DISCIPLINES      **** UNDGR AND GRAD ****       FAC RESRCH  *** OTHER ***       TOTAL     PROB                          D     ON   OFF
                   COURSES STDNTS THOUS& RESRCH     SPON  N-SPON SFT-DV  MISC       *****     SOLV SIMUL  CAT   CAI   CMI   E    CAMP CAMP

ENGINEERING             0      0      0      0         0      0      0      0           0       0     0     0     0     0  0-     5    5
                                                                                                                           1-     0    0
          INSTL:        0      0      0      0         0      0      0      0           0       0     0     0     0     0  2-     0    0
          INST:         0      0      0      0         0      0      0      0           0       0     0     0     0     0
          (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND       0      0      0      0        13      3      3      0          19       2     0     1     0     0  0-     2    1
 LIFE SCIENCES                                                                                                             1-     0    1
          INSTL:        0      0      0      0         1      1      1      0           1       2     0     1     0     0  2-     0    0
          INST:         0      0      0      0         1      1      1      0           1       2     0     1     0     0
          (NUMBER REPORTING PER CATEGORY)

COMPUTER                1     20      0      0         0      0      0      0           0       1     1     0     0     0  0-     1    0
 SCIENCES                                                                                                                  1-     0    1
          INSTL:        1      1      0      0         0      0      0      0           0       1     1     0     0     0  2-     0    0
          INST:         1      1      0      0         0      0      0      0           0       1     1     0     0     0
          (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND         6    135      2      0         0      1      0      0           3       2     2     1     0     0  0-     2    2
 STATISTICS                                                                                                                1-     0    0
          INSTL:        2      2      1      0         0      1      0      0           1       2     2     1     0     0  2-     0    0
          INST:         2      2      1      0         0      1      0      0           1       2     2     1     0     0
          (NUMBER REPORTING PER CATEGORY)

PHYSICAL                4     10      0      0         0      0      0      0           0       2     1     1     0     0  0-     2    2
 SCIENCES                                                                                                                  1-     0    0
          INSTL:        1      1      0      0         0      0      0      0           0       2     1     1     0     0  2-     0    0
          INST:         1      1      0      0         0      0      0      0           0       2     1     1     0     0
          (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY              0      0      0      0         0      0      0      0           0       0     0     0     0     0  0-     0    0
                                                                                                                           1-     0    0
          INSTL:        0      0      0      0         0      0      0      0           0       0     0     0     0     0  2-     0    0
          INST:         0      0      0      0         0      0      0      0           0       0     0     0     0     0
          (NUMBER REPORTING PER CATEGORY)

SOCIAL                  0      0      0      0         0      0      0      0           0       0     0     0     0     0  0-     1    0
 SCIENCES                                                                                                                  1-     0    1
          INSTL:        0      0      0      0         0      0      0      0           0       0     0     0     0     0  2-     0    0
          INST:         0      0      0      0         0      0      0      0           0       0     0     0     0     0
          (NUMBER REPORTING PER CATEGORY)

EDUCATION               7    792      3      0         0      0      3      0           6       1     1     1     1     0  0-     2    2
                                                                                                                           1-     0    0
          INSTL:        1      2      1      0         0      0      1      0           1       1     1     1     1     0  2-     0    0
          INST:         1      2      1      0         0      0      1      0           1       1     1     1     1     0
          (NUMBER REPORTING PER CATEGORY)

BUSINESS AND            2     10      1      0         0      0      0      0           1       2     0     0     0     0  0-     2    2
 COMMERCE                                                                                                                  1-     0    0
          INSTL:        1      1      1      0         0      0      0      0           1       2     0     0     0     0  2-     0    0
          INST:         1      1      1      0         0      0      0      0           1       2     0     0     0     0
          (NUMBER REPORTING PER CATEGORY)

ALL OTHER               0      0      0      0         0      0      0      0           0       0     0     0     0     0  0-     0    0
                                                                                                                           1-     0    0
          INSTL:        0      0      0      0         0      0      0      0           0       0     0     0     0     0  2-     0    0
          INST:         0      0      0      0         0      0      0      0           0       0     0     0     0     0
          (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONCUCTED BY THE COMPUTER SCIENCF DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                              PAGE VIII-38

                                       SUMMARY OF INSTRUCTIONAL ANC RESEARCH USE

   GROUP (PRIVATE:MASTERS:  500-2499   )

          TOTAL NUMBER OF INSTITUTIONS             =  220      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   97
          TOTAL NUMBER OF INSTITUTIONS REPORTING =  108      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =   83

 USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. CR NCN PROFIT    9:   COLLEGE OR UNIV.   20:   COMMERCIAL    2

                 * INSTALLATION FUNCTION *                               * LOWEST LEVEL OF RECORC KEEPING *
                 NETWORK   NETWORK    LOCAL                  NO                  SCHOOL              COURSE     COURSES    INDIVIDUAL
                  ONLY     & LOCAL     ONLY               RECORDS    CAMPUS     OR COL      DEPT      NUMBER     BY SECT     STUDENTS

            INSTL:   4        13        60                    25         9         10         16          5          7            4
            INST:    3        13        56                    24         9         10         16          5          6            4
            (NUMBER REPORTING PER CATEGORY)

 ACADEMIC FIELDS     TOTL STDNT USE, COURSEWK      USE BY FACULTY AND STAFF     *****    MODE/TYPE CF INSTR USE      C  OTHR COMP
  AND DISCIPLINES    **** UNDGR AND GRAD ****      FAC RESRCH  *** OTHER ***    TOTAL    PROB                        D   ON   OFF
                   COURSES STDNTS THOUS$ RESRCH    SPON  N-SPON SFT-DV  MISC    *****    SOLV SIMUL  CAT  CAI  CMI   E  CAMP CAMP

  ENGINEERING          82   1659    13      1        0     1     0      0        15       6     5    1    0    0  0-   26   25
                                                                                                                1-    1    2
            INSTL:      7      7     2      1        0     1     0      0         2       6     5    1    0    0  2-    0    0
            INST:       7      7     2      1        0     1     0      0         2       6     5    1    0    0
            (NUMBER REPORTING PER CATEGORY)

  ENVIRONMENTAL AND    67    868     4      1        7     3     0      0        15       9    11    2    4    1  0-   15   14
   LIFE SCIENCES                                                                                                1-    2    3
            INSTL:     16     14     2      1        3     2     0      0         5       9    11    2    4    1  2-    1    1
            INST:      16     14     2      1        3     2     0      0         5       9    11    2    4    1
            (NUMBER REPORTING PER CATEGORY)

  COMPUTER            197   3307    77      4        1     4     1      1        88      28    13    3    8    2  0-   33   35
   SCIENCES                                                                                                     1-    6    3
            INSTL:     38     33    16      3        1     2     1      1        17      28    13    3    8    2  2-    0    1
            INST:      37     32    15      3        1     2     1      1        15      27    13    3    8    2
            (NUMBER REPORTING PER CATEGORY)

  MATHEMATICS AND     207   3762    89      4        1     8    15      0       117      38    17    2    8    1  0-   37   38
   STATISTICS                                                                                                   1-    9    7
            INSTL:     44     40    21      3        1     4     5      0        23      38    17    2    8    1  2-    0    1
            INST:      43     39    21      3        1     4     4      0        21      37    17    2    8    1
            (NUMBER REPORTING PER CATEGORY)

  PHYSICAL            163   2223    28      6       10     1     1      2        48      23    14    1    5    2  0-   27   25
   SCIENCES                                                                                                     1-    7    8
            INSTL:     30     27     8      3        5     1     1      1        12      23    14    1    5    2  2-    0    1
            INST:      28     25     7      3        3     1     1      1         9      22    14    1    5    2
            (NUMBER REPORTING PER CATEGORY)

  PSYCHOLOGY           47    613     3      0        1     7     0      0        11      13     6    1    3    2  0-   18   21
                                                                                                                1-    4    0
            INSTL:     17     13     3      0        1     3     0      0         7      13     6    1    3    2  2-    0    1
            INST:      17     13     3      0        1     3     0      0         7      13     6    1    3    2
            (NUMBER REPORTING PER CATEGORY)

  SOCIAL               74   1151    31      5        4     6     8      0        54      15     9    0    2    1  0-   21   20
   SCIENCES                                                                                                     1-    5    5
            INSTL:     22     17     6      2        2     2     3      0         9      15     9    0    2    1  2-    0    1
            INST:      22     17     6      2        1     2     2      0         7      14     9    0    2    1
            (NUMBER REPORTING PER CATEGORY)

  EDUCATION            16    461     5      1        1     1     0      0         8       4     3    2    1    0  0-   10   10
                                                                                                                1-    1    0
            INSTL:     10     10     3      1        1     1     0      0         4       4     3    2    1    0  2-    0    1
            INST:      10     10     3      1        1     1     0      0         4       4     3    2    1    0
            (NUMBER REPORTING PER CATEGORY)

  BUSINESS AND         61   1674    21      0        1     1     1      0        24      18    11    1    4    1  0-   23   23
   COMMERCE                                                                                                     1-    3    2
            INSTL:     24     22     9      0        1     1     1      0        10      18    11    1    4    1  2-    0    1
            INST:      24     22     9      0        1     1     1      0         9      17    10    1    4    1
            (NUMBER REPORTING PER CATEGORY)

  ALL OTHER            25    422     6     11        1     1     0      0        19       8     2    2    2    0  0-   11   11
                                                                                                                1-    2    2
            INSTL:     11     11     3      2        1     1     0      0         7       8     2    2    2    0  2-    1    1
            INST:      11     11     3      2        1     1     0      0         7       8     2    2    2    0
            (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                  CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                           UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                     PAGE VIII-39

                                     SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

    GROUP (PRIVATE:MASTERS:  2500-9999  )

         TOTAL NUMBER OF INSTITUTIONS              =   89      TOTAL NUMBER OF INSTALLATIONS REPORTED      =   65
         TOTAL NUMBER OF INSTITUTIONS REPORTING =   60      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =   58

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT    3;   COLLEGE OR UNIV.    6;   COMMERCIAL    3

                   * INSTALLATION FUNCTION *                              * LOWEST LEVEL OF RECORD KEEPING *
                  NETWORK   NETWORK    LOCAL                 NO                  SCHOOL               COURSE    COURSES    INDIVIDUAL
                   ONLY     & LOCAL    ONLY               RECORDS    CAMPUS      OR COL     DEPT      NUMBER    BY SECT     STUDENTS

           INSTL:    1         12        44                  15         5           5        12         5          8            8
           INST:     1         12        42                  15         4           5        12         5          8            8
           (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS       TOTL STDNT USE, COURSEWK     USE BY FACULTY AND STAFF       *****     MODE/TYPE OF INSTR USE       C   OTHR COMP
AND DISCIPLINES       **** UNDGR AND GRAD ****     FAC RESRCH  *** OTHER ***      TOTAL    PROB                          D    ON   OFF
                   COURSES STDNTS THOUS$ RESRCH    SPON  N-SPON SFT-DV  MISC      *****    SOLV SIMUL   CAT   CAI   CMI  E   CAMP CAMP

ENGINEERING           176   2045    135      3       0      9     81      0        228      12     6     1     0     0  0-    18   21
                                                                                                                     1-     6    2
           INSTL:      12     13      8      1       0      2      2      0          9      12     6     1     0     0  2-     1    2
           INST:       12     13      8      1       0      2      2      0          9      12     6     1     0     0
           (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND      23    555      9      1       0      2      2      0         14       8     6     2     2     0  0-    11   10
 LIFE SCIENCES                                                                                                       1-     2    3
           INSTL:      11     12      7      1       0      2      1      0          7       8     6     2     2     0  2-     0    0
           INST:       11     12      7      1       0      2      1      0          7       8     6     2     2     0
           (NUMBER REPORTING PER CATEGORY)

COMPUTER              306   9428    625     21       2     23     40      3        714      23    10     3     4     1  0-    22   22
 SCIENCES                                                                                                            1-     7    7
           INSTL:      28     27     17      5       1      6      6      3         19      23    10     3     4     1  2-     0    0
           INST:       28     27     17      5       1      6      6      3         19      23    10     3     4     1
           (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND       138   3757    120      1       0      1     15      0        137      30    10     2     2     0  0-    32   30
 STATISTICS                                                                                                          1-     4    7
           INSTL:      35     33     17      1       0      1      2      0         20      30    10     2     2     0  2-     1    0
           INST:       34     32     17      1       0      1      2      0         20      29    10     2     2     0
           (NUMBER REPORTING PER CATEGORY)

PHYSICAL               89   1745     71     14       2     10      6      2        105      25     8     3     3     0  0-    22   20
 SCIENCES                                                                                                            1-     7    9
           INSTL:      26     27     15      4       1      3      4      2         18      25     8     3     3     0  2-     0    0
           INST:       25     26     15      4       1      3      4      2         18      24     8     3     3     0
           (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY             58    915     38      4      10      7     12      0         71      19     8     5     0     0  0-    19   18
                                                                                                                     1-     4    6
           INSTL:      19     20      8      3       1      3      2      0         10      19     8     5     0     0  2-     1    0
           INST:       19     20      8      3       1      3      2      0         10      19     8     5     0     0
           (NUMBER REPORTING PER CATEGORY)

SOCIAL                 50   1253     67      0       0      2      4      0         73      17     9     4     1     0  0-    20   16
 SCIENCES                                                                                                            1-     3    7
           INSTL:      17     18     11      0       0      2      1      0         12      17     9     4     1     0  2-     0    0
           INST:       17     18     11      0       0      2      1      0         12      17     9     4     1     0
           (NUMBER REPORTING PER CATEGORY)

EDUCATION              31    723     11      0       0      1      0      0         12      10     5     1     3     0  0-     9    8
                                                                                                                     1-     3    5
           INSTL:      10     10      8      0       0      1      0      0          8      10     5     1     3     0  2-     1    0
           INST:       10     10      8      0       0      1      0      0          8      10     5     1     3     0
           (NUMBER REPORTING PER CATEGORY)

BUSINESS AND          366  10765    354      8       0     14     10      1        387      33    21     5     4     2  0-    33   27
 COMMERCE                                                                                                            1-     4   10
           INSTL:      38     39     23      4       0      5      7      1         23      33    21     5     4     2  2-     2    2
           INST:       38     38     23      4       0      5      7      1         23      33    21     5     4     2
           (NUMBER REPORTING PER CATEGORY)

ALL OTHER              34   1772    132     10       3     11      4      1        161       6     3     1     4     0  0-    11    9
                                                                                                                     1-     2    4
           INSTL:      10     10      8      4       1      4      3      1         10       6     3     1     4     0  2-     0    0
           INST:       10     10      8      4       1      4      3      1         10       6     3     1     4     0
           (NUMBER REPORTING PER CATEGORY)
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                              SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

    GROUP (PRIVATE:MASTERS;  10000-19999)

         TOTAL NUMBER OF INSTITUTIONS            =    3      TOTAL NUMBER OF INSTALLATIONS REPORTED      =    3
         TOTAL NUMBER OF INSTITUTIONS REPORTING  =    3      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL   =    3

 USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT    0;   COLLEGE OR UNIV.    0;   COMMERCIAL    0

                  * INSTALLATION FUNCTION *                                  * LOWEST LEVEL OF RECORD KEEPING *
                  NETWORK   NETWORK    LOCAL               NO                SCHOOL               COURSE     COURSES    INDIVIDUAL
                   ONLY     & LOCAL     ONLY            RECORDS    CAMPUS    OR COL      DEPT     NUMBER     BY SECT     STUDENTS

          INSTL:    0          1          1                2          0         0          0         0          0            0
          INST:     0          1          1                2          0         0          0         0          0            0
          (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS      TOTL STDNT USE, COURSEWK      USE BY FACULTY AND STAFF      *****    MODE/TYPE OF INSTR USE     C   OTHR COMP
 AND DISCIPLINES     **** UNDGR AND GRAD ****      FAC RESRCH  *** OTHER ***     TOTAL    PROB                       D    ON   OFF
                  COURSES STDNTS THOUS$ RESRCH     SPON  N-SPON SFT-DV  MISC     *****    SOLV SIMUL  CAT  CAI  CMI  E   CAMP CAMP

ENGINEERING            0      0      0      0        0      0      0      0        0       0     0     0    0    0  0-     2    2
                                                                                                                  1-     0    0
          INSTL:       0      0      0      0        0      0      0      0        0       0     0     0    0    0  2-     0    0
          INST:       [illegible]      0      0      0        0      0      0      0        0       0     0     0    0    0
          (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND      3     80      2      0        0      0      0      0        2       1     1     0    0    0  0-     1    1
 LIFE SCIENCES                                                                                                    1-     0    0
          INSTL:       1      1      1      0        0      0      0      0        1       1     1     0    0    0  2-     0    0
          INST:        1      1      1      0        0      0      0      0        1       1     1     0    0    0
          (NUMBER REPORTING PER CATEGORY)

COMPUTER              35    830     13      0        0      0      0      0       13       1     0     0    0    0  0-     1    1
 SCIENCES                                                                                                         1-     0    0
          INSTL:       1      1      1      0        0      0      0      0        1       1     0     0    0    0  2-     0    0
          INST:        1      1      1      0        0      0      0      0        1       1     0     0    0    0
          (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND        2     25      1      0        0      0      0      0        1       1     0     0    0    0  0-     1    1
 STATISTICS                                                                                                       1-     0    0
          INSTL:       1      1      1      0        0      0      0      0        1       1     0     0    0    0  2-     0    0
          INST:        1      1      1      0        0      0      0      0        1       1     0     0    0    0
          (NUMBER REPORTING PER CATEGORY)

PHYSICAL               2     30      1      0        0      0      0      0        1       1     1     0    0    0  0-     1    1
 SCIENCES                                                                                                         1-     0    0
          INSTL:       1      1      1      0        0      0      0      0        1       1     1     0    0    0  2-     0    0
          INST:        1      1      1      0        0      0      0      0        1       1     1     0    0    0
          (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY             0      0      0      0        0      0      0      0        0       1     0     0    0    0  0-     1    1
                                                                                                                  1-     0    0
          INSTL:       0      0      0      0        0      0      0      0        0       1     0     0    0    0  2-     0    0
          INST:        0      0      0      0        0      0      0      0        0       1     0     0    0    0
          (NUMBER REPORTING PER CATEGORY)

SOCIAL                21    447      3      0        0      0      0      0        3       1     0     0    0    0  0-     1    1
 SCIENCES                                                                                                         1-     0    0
          INSTL:       1      1      1      0        0      0      0      0        1       1     0     0    0    0  2-     0    0
          INST:        1      1      1      0        0      0      0      0        1       1     0     0    0    0
          (NUMBER REPORTING PER CATEGORY)

EDUCATION              0      0      0      0        0      0      0      0        0       0     0     0    0    0  0-     0    0
                                                                                                                  1-     0    0
          INSTL:       0      0      0      0        0      0      0      0        0       0     0     0    0    0  2-     0    0
          INST:        0      0      0      0        0      0      0      0        0       0     0     0    0    0
          (NUMBER REPORTING PER CATEGORY)

BUSINESS AND          46   1330      8      0        0      0      0      0        8       1     1     0    0    0  0-     1    1
 COMMERCE                                                                                                         1-     0    0
          INSTL:       1      1      1      0        0      0      0      0        1       1     1     0    0    0  2-     0    0
          INST:        1      1      1      0        0      0      0      0        1       1     1     0    0    0
          (NUMBER REPORTING PER CATEGORY)

ALL OTHER             10    175      3      0        0      0      0      0        3       1     0     0    0    0  0-     1    1
                                                                                                                  1-     0    0
          INSTL:       1      1      1      0        0      0      0      0        1       1     0     0    0    0  2-     0    0
          INST:        1      1      1      0        0      0      0      0        1       1     0     0    0    0
          (NUMBER REPORTING PER CATEGORY)
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INVENTCRY CF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                  CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FCUNDATICN                                PAGE VIII-41

                                     SUMMARY OF INSTRUCTICNAL ANC RESEARCH USE

  GROUP (PRIVATE:COCTORATE:BELOW 500  )

        TOTAL NUMBER OF INSTITUTIONS            =   73      TOTAL NUMBER OF INSTALLATICNS REPORTEC      =    7
        TOTAL NUMBER OF INSTITUTIONS REPORTING =   48      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL   =    7

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT    1:    CCLLEGE OR UNIV.    0:    COMMERCIAL    0

                 * INSTALLATION FUNCTION *                                  * LOWEST LEVEL OF RECORD KEEPING *
                NETWORK   NETWORK    LOCAL               NO                 SCHOOL                COURSE    COURSES    INDIVIDUAL
                 ONLY     & LOCAL     ONLY             RECORDS   CAMPUS     OR CCL      DEPT      NUMBER    BY SECT     STUDENTS

          INSTL:   0         0         3                  0         1          0          1          1         0            0
          INST:    0         0         3                  0         1          0          1          1         0            0
          (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS      TOTL STDNT USE, COURSEWK      USE BY FACULTY AND STAFF       *****    MODE/TYPE OF INSTR USE      C   OTHR COMP
AND DISCIPLINES      **** UNDGR AND GRAD ****      FAC RESRCH  *** OTHER ***      TOTAL    PROB                        D    ON   OFF
                   COURSES STDNTS THOUS$ RESRCH    SPON  N-SPON SFT-DV  MISC      *****    SOLV SIMUL  CAT  CAI  CMI  E  , CAMP CAMP

ENGINEERING            2     30      3     30       0     10      0      0          43       1     1     0    0    0  0-    2    1
                                                                                                                     1-    0    1
          INSTL:       1      1      1      1       0      1      0      0           1       1     1     0    0    0  2-    0    0
          INST:        1      1      1      1       0      1      0      0           1       1     1     0    0    0
          (NUMBER REPORTING PER CATEGCRY)

ENVIRONMENTAL AND     20    100     20     30      40     15     20      0         125       2     1     0    0    0  0-    1    1
 LIFE SCIENCES                                                                                                       1-    1    1
          INSTL:       1      1      1      1       1      2      1      0           2       2     1     0    0    0  2-    0    0
          INST:        1      1      1      1       1      2      1      0           2       2     1     0    0    0
          (NUMBER REPORTING PER CATEGORY)

COMPUTER               1     20      5      0       0      0      0      0           5       1     0     0    0    0  0-    1    1
 SCIENCES                                                                                                            1-    0    0
          INSTL:       1      1      1      0       0      0      0      0           1       1     0     0    0    0  2-    0    0
          INST:        1      1      1      0       0      0      0      0           1       1     0     0    0    0
          (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND        5     35      8      8       4     11      2      0          33       2     1     0    0    0  0-    1    0
 STATISTICS                                                                                                          1-    1    2
          INSTL:       2      2      2      2       1      2      1      0           2       2     1     0    0    0  2-    0    0
          INST:        2      2      2      2       1      2      1      0           2       2     1     0    0    0
          (NUMBER REPORTING PER CATEGCRY)

PHYSICAL               8     45      7     36       8      7      4      0          62       2     2     0    0    0  0-    1    0
 SCIENCES                                                                                                            1-    1    2
          INSTL:       2      2      2      2       1      2      1      0           2       2     2     0    0    0  2-    0    0
          INST:        2      2      2      2       1      2      1      0           2       2     2     0    0    0
          (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY             1     10      2      3       4      1      2      0          12       1     1     0    0    0  0-    0    0
                                                                                                                     1-    1    1
          INSTL:       1      1      1      1       1      1      1      0           1       1     1     0    0    0  2-    0    0
          INST:        1      1      1      1       1      1      1      0           1       1     1     0    0    0
          (NUMBER REPORTING PER CATEGORY)

SOCIAL                 0      0      0      0       0      0      0      0           0       0     0     0    0    0  0-    0    0
 SCIENCES                                                                                                            1-    0    0
          INSTL:       0      0      0      0       0      0      0      0           0       0     0     0    0    0  2-    0    0
          INST:        0      0      0      0       0      0      0      0           0       0     0     0    0    0
          (NUMBER REPORTING PER CATEGORY)

EDUCATION              0      0      0      0       0      0      0      0           0       0     0     0    0    0  0-    0    0
                                                                                                                     1-    0    0
          INSTL:       0      0      0      0       0      0      0      0           0       0     0     0    0    0  2-    0    0
          INST:        0      0      0      0       0      0      0      0           0       0     0     0    0    0
          (NUMBER REPORTING PER CATEGORY)

BUSINESS AND           1     15      1      0       0      0      0      0           1       0     1     0    0    0  0-    1    1
 COMMERCE                                                                                                            1-    0    0
          INSTL:       1      1      1      0       0      0      0      0           1       0     1     0    0    0  2-    0    0
          INST:        1      1      1      0       0      0      0      0           1       0     1     0    0    0
          (NUMBER REPORTING PER CATEGORY)

ALL OTHER              0      0      0      0       0      0      0      0           0       0     0     0    0    0  0-    0    0
                                                                                                                     1-    0    0
          INSTL:       0      0      0      0       0      0      0      0           0       0     0     0    0    0  2-    0    0
          INST:        0      0      0      0       0      0      0      0           0       0     0     0    0    0
          (NUMBER REPORTING PER CATEGCRY)
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                                        SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

     GROUP (PRIVATE:DOCTORATE:500-2499    )

          TOTAL NUMBER OF INSTITUTIONS             =   44      TOTAL NUMBER OF INSTALLATIONS REPORTED     =   29
          TOTAL NUMBER OF INSTITUTIONS REPORTING =   28      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =   21

  USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. OR NON PROFIT     2:   COLLEGE OR UNIV.    4:   COMMERCIAL     1

                    * INSTALLATION FUNCTION *                                    * LOWEST LEVEL OF RECORD KEEPING *
                    NETWORK   NETWORK    LOCAL                    NO                  SCHOOL              COURSE     COURSES    INDIVIDUAL
                     ONLY     & LOCAL    ONLY                   RECORDS    CAMPUS    OR COL      DEPT     NUMBER     BY SECT     STUDENTS

              INSTL:    2          4        13                     8          1         1          4         2          1            2
              INST:     2          4        13                     8          1         1          4         2          1            2
              (NUMBER REPORTING PER CATEGORY)

 ACADEMIC FIELDS      TOTL STDNT USE, COURSEWK        USE BY FACULTY AND STAFF       *****     MODE/TYPE OF INSTR USE      C    OTHR COMP
 AND DISCIPLINES      **** UNDGR AND GRAD ****        FAC RESRCH   *** OTHER ***     TOTAL    PROB                         O     ON   OFF
                    COURSES STDNTS THOUS$ RESRCH      SPON   N-SPON  SFT-DV  MISC    *****    SOLV  SIMUL   CAT   CAT   CMI  E    CAMP CAMP

 ENGINEERING             0      0      0      0        106     79      0      0       185      0     0      0     0     0  0-     4    4
                                                                                                                          1-     1    0
              INSTL:     0      0      0      0          1      1      0      0         1      0     0      0     0     0  2-     0    1
              INST:      0      0      0      0          1      1      0      0         1      0     0      0     0     0
              (NUMBER REPORTING PER CATEGORY)

 ENVIRONMENTAL AND      14    308     18      0         33     53      0      0       104      4     1      0     0     0  0-     4    3
  LIFE SCIENCES                                                                                                           1-     2    2
              INSTL:     4      4      3      0          3      4      0      0         5      4     1      0     0     0  2-     0    1
              INST:      4      4      3      0          3      4      0      0         5      4     1      0     0     0
              (NUMBER REPORTING PER CATEGORY)

 COMPUTER               12    231     29      0         30      2      1      1        63      3     0      0     0     0  0-     4    3
  SCIENCES                                                                                                                1-     0    0
              INSTL:     4      4      3      0          1      1      1      1         3      3     0      0     0     0  2-     0    1
              INST:      4      4      3      0          1      1      1      1         3      3     0      0     0     0
              (NUMBER REPORTING PER CATEGORY)

 MATHEMATICS AND        21    557     16      0         80     36      0      0       132      4     0      0     0     0  0-     7    7
  STATISTICS                                                                                                              1-     1    0
              INSTL:     7      6      3      0          1      1      0      0         4      4     0      0     0     0  2-     0    1
              INST:      7      6      3      0          1      1      0      0         4      4     0      0     0     0
              (NUMBER REPORTING PER CATEGORY)

 PHYSICAL               20    381      1      0        173     82      0      0       256      3     1      0     0     0  0-     5    4
  SCIENCES                                                                                                                1-     2    3
              INSTL:     5      4      1      0          3      2      0      0         3      3     1      0     0     0  2-     0    0
              INST:      5      4      1      0          3      2      0      0         3      3     1      0     0     0
              (NUMBER REPORTING PER CATEGORY)

 PSYCHOLOGY              8    147      1      0          0      0      0      0         1      2     0      0     0     0  0-     4    3
                                                                                                                          1-     0    1
              INSTL:     2      3      1      0          0      0      0      0         1      2     0      0     0     0  2-     0    0
              INST:      2      3      1      0          0      0      0      0         1      2     0      0     0     0
              (NUMBER REPORTING PER CATEGORY)

 SOCIAL                 40    692      6      1          1      6      5      0        19      3     1      0     1     1  0-     5    3
  SCIENCES                                                                                                                1-     0    2
              INSTL:     5      4      2      1          1      2      1      0         3      3     1      0     1     1  2-     0    0
              INST:      5      4      2      1          1      2      1      0         3      3     1      0     1     1
              (NUMBER REPORTING PER CATEGORY)

 EDUCATION               1     11      0      1          1      0      0      0         2      1     0      0     0     0  0-     1    0
                                                                                                                          1-     0    1
              INSTL:     1      1      0      1          1      0      0      0         1      1     0      0     0     0  2-     0    0
              INST:      1      1      0      1          1      0      0      0         1      1     0      0     0     0
              (NUMBER REPORTING PER CATEGORY)

 BUSINESS AND           45    105     60      0         50     50    200      0       360      1     1      0     0     0  0-     2    2
  COMMERCE                                                                                                                1-     0    0
              INSTL:     2      1      1      0          1      1      1      0         1      1     1      0     0     0  2-     0    0
              INST:      2      1      1      0          1      1      1      0         1      1     1      0     0     0
              (NUMBER REPORTING PER CATEGORY)

 ALL OTHER               1    106      3      0        302     33      1     85       424      2     0      0     0     0  0-     5    4
                                                                                                                          1-     0    1
              INSTL:     1      3      1      0          3      1      1      1         4      2     0      0     0     0  2-     0    0
              INST:      1      3      1      0          3      1      1      1         4      2     0      0     0     0
              (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

GROUP (PRIVATE:DOCTORATE:2500-9999)

TOTAL NUMBER OF INSTITUTIONS = 71
TOTAL NUMBER OF INSTITUTIONS REPORTING = 39
TOTAL NUMBER OF INSTALLATIONS REPORTED = 62
TOTAL NUMBER OF INSTITUTIONS RPTING INSTL = 36

USE OF OFF-CAMPUS COMPUTERS BY INSTAL: COOP. OR NON PROFIT 3; COLLEGE OR UNIV. 5; COMMERCIAL 3

	* INSTALLATION FUNCTION *			* LOWEST LEVEL OF RECORD KEEPING *						
	NETWORK ONLY	NETWORK & LOCAL	LOCAL ONLY	NO RECORDS	CAMPUS	SCHOOL OR COL	DEPT	COURSE NUMBER	COURSES BY SECT	INDIVIDUAL STUDENTS
INSTL:	0	8	34	10	2	5	9	7	4	7
INST:	0	8	25	8	2	5	9	7	4	7
(NUMBER REPORTING PER CATEGORY)										

ACADEMIC FIELDS AND DISCIPLINES		TOTL STDNT USE, COURSEWK **** UNDGR AND GRAD **** COURSES	STDNTS	THOUS$	RESRCH	USE BY FACULTY AND STAFF FAC RESRCH SPON	N-SPON	*** OTHER *** SFT DV	MISC	***** TOTAL *****	MODE/TYPE OF INSTR USE PROB SOLV	SIMUL	CAT	CAI	CMI	CODE	OTHR COMP ON CAMP	OFF CAMP
ENGINEERING		690	17112	839	309	722	418	29	2	2319	17	13	1	5	0	0-	20	25
																1-	13	6
	INSTL:	19	18	14	8	13	14	5	2	18	17	13	1	5	0	2-	0	2
	INST:	16	16	14	8	12	13	4	2	16	15	11	1	5	0			
	(NUMBER REPORTING PER CATEGORY)																	
ENVIRONMENTAL AND		105	2781	69	6	132	151	2	0	360	10	5	3	2	0	0-	8	11
LIFE SCIENCES																1-	7	2
	INSTL:	12	11	10	4	8	10	2	0	12	10	5	3	2	0	2-	0	2
	INST:	12	11	10	4	8	10	2	0	12	10	5	3	2	0			
	(NUMBER REPORTING PER CATEGORY)																	
COMPUTER		342	13100	565	36	46	112	26	13	798	17	9	1	5	0	0-	12	16
SCIENCES																1-	11	6
	INSTL:	20	19	15	4	6	9	1	2	16	17	9	1	5	0	2-	0	1
	INST:	20	19	15	4	6	9	1	2	16	17	9	1	5	0			
	(NUMBER REPORTING PER CATEGORY)																	
MATHEMATICS AND		215	7095	146	8	18	74	1	0	247	17	6	0	4	1	0-	19	20
STATISTICS																1-	5	3
	INSTL:	20	18	15	4	5	12	1	0	17	17	6	0	4	1	2-	0	1
	INST:	20	18	15	4	5	12	1	0	17	17	6	0	4	1			
	(NUMBER REPORTING PER CATEGORY)																	
PHYSICAL		183	3243	329	91	296	587	14	1	1318	18	8	3	4	0	0-	10	13
SCIENCES																1-	12	7
	INSTL:	20	19	14	5	10	12	2	1	15	18	8	3	4	0	2-	0	2
	INST:	20	19	14	5	10	12	2	1	15	18	8	3	4	0			
	(NUMBER REPORTING PER CATEGORY)																	
PSYCHOLOGY		87	1307	58	0	24	76	4	0	162	10	3	0	3	0	0-	10	12
																1-	7	3
	INSTL:	12	11	8	0	3	9	2	0	11	10	3	0	3	0	2-	0	2
	INST:	12	11	8	0	3	9	2	0	11	10	3	0	3	0			
	(NUMBER REPORTING PER CATEGORY)																	
SOCIAL		271	4420	137	3	53	188	3	0	384	13	3	1	5	0	0-	16	12
SCIENCES																1-	1	5
	INSTL:	15	14	9	2	6	10	1	0	11	13	3	1	5	0	2-	1	1
	INST:	15	14	9	2	6	10	1	0	11	13	3	1	5	0			
	(NUMBER REPORTING PER CATEGORY)																	
EDUCATION		24	198	12	1	4	10	1	0	28	8	0	0	1	0	0-	11	10
																1-	1	1
	INSTL:	8	7	5	1	2	3	1	0	7	8	0	0	1	0	2-	0	1
	INST:	8	7	5	1	2	3	1	0	7	8	0	0	1	0			
	(NUMBER REPORTING PER CATEGORY)																	
BUSINESS AND		396	12599	9057	1159	224	2444	6	314	13204	17	13	3	5	2	0-	17	16
COMMERCE																1-	4	3
	INSTL:	20	18	16	7	6	13	3	3	16	17	13	3	5	2	2-	0	2
	INST:	20	18	16	7	6	13	3	3	16	17	13	3	5	2			
	(NUMBER REPORTING PER CATEGORY)																	
ALL OTHER		81	3130	218	94	152	76	9	686	1235	9	1	0	1	0	0-	11	10
																1-	4	4
	INSTL:	9	8	9	4	5	7	2	2	14	9	1	0	1	0	2-	0	1
	INST:	9	8	9	4	5	6	2	2	13	9	1	0	1	0			
	(NUMBER REPORTING PER CATEGORY)																	

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                              SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

     GROUP (PRIVATE:DOCTCRATE:10000-19999)

          TOTAL NUMBER OF INSTITUTIONS             =   18     TOTAL NUMBER OF INSTALLATICNS REPORTEC     =   33
          TOTAL NUMBER OF INSTITUTICNS REPORTING =     12     TOTAL NUMBER OF INSTITUTIONS RPTING INSTL  =   12

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. CR NCN PROFIT    8:   CCLLEGE OR UNIV.    1:   COMMERCIAL    1

                      * INSTALLATION FUNCTION *                              * LOWEST LEVEL CF RECORC KEEPING *
                      NETWCRK   NETWORK    LOCAL              NO                      SCHOOL                COURSE     COURSES     INDIVIDUAL
                       ONLY     & LOCAL     ONLY            RECORDS     CAMPUS       OR COL       DEPT       NUMBER     BY SECT      STUDENTS

               INSTL:    0         6         21                7           2            2           9           1           3            3
               INST:     0         5         10                3           2            2           4           1           3            3
               (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS       TOTL STDNT USE, COURSEWK       USE BY FACULTY AND STAFF          *****     MODE/TYPE CF INSTR USE       C    OTHR COMP
 AND DISCIPLINES      **** UNDGR AND GRAD ****       FAC RESRCH  *** OTHER ***         TOTAL     PROB                         D     ON   OFF
                    COURSES STDNTS THOUS$ RESRCH     SPON  N-SPON SFT-DV  MISC          *****     SOLV SIMUL  CAT  CAI  CMI    E    CAMP CAMP

 ENGINEERING            108   4085   130    164      112    148      0      0           554       6     5     0    1    1   0-    18   20
                                                                                                                              1-     2    0
               INSTL:     6      7     4      2        3      2      0      0             5       6     5     0    1    1   2-     0    0
               INST:      6      6     4      2        3      2      0      0             5       5     4     0    1    1
               (NUMBER REPORTING PER CATEGORY)

 ENVIRONMENTAL AND       24    896    47     10       83    105      0      0           245       5     2     1    2    0   0-     5    6
  LIFE SCIENCES                                                                                                               1-     3    2
               INSTL:     7      7     6      3        3      4      0      0             7       5     2     1    2    0   2-     0    0
               INST:      7      7     6      3        3      4      0      0             7       5     2     1    2    0
               (NUMBER REPORTING PER CATEGORY)

 COMPUTER                91   4251   230      3        7     15      0      0           255       8     5     1    0    0   0-     9   10
  SCIENCES                                                                                                                    1-     2    1
               INSTL:    11     11     8      1        2      1      0      0             8       8     5     1    0    0   2-     0    0
               INST:      9      9     7      1        2      1      0      0             7       7     5     1    0    0
               (NUMBER REPORTING PER CATEGORY)

 MATHEMATICS AND         51   2949   192      2        7     21      0      0           222       5     1     1    1    1   0-     9    8
  STATISTICS                                                                                                                  1-     0    1
               INSTL:     8      8     6      1        2      3      0      0             7       5     1     1    1    1   2-     0    0
               INST:      8      8     6      1        2      3      0      0             7       5     1     1    1    1
               (NUMBER REPORTING PER CATEGORY)

 PHYSICAL                38    989    49     16       52    104      0      0           221       7     1     1    0    1   0-     7    9
  SCIENCES                                                                                                                    1-     3    1
               INSTL:     9      9     6      2        3      3      0      0             8       7     1     1    0    1   2-     0    0
               INST:      9      9     6      2        3      3      0      0             8       7     1     1    0    1
               (NUMBER REPORTING PER CATEGOPY)

 PSYCHCLCGY              42   2259    42     14       38     25      0      0           169       5     2     2    0    0   0-     5    6
                                                                                                                              1-     2    1
               INSTL:     6      6     4      3        2      3      0      0             5       5     2     2    0    0   2-     0    0
               INST:      6      6     4      3        2      3      0      0             5       5     2     2    0    0
               (NUMBER REPORTING PER CATEGORY)

 SOCIAL                  92   3624   146     29       74     67      0      0           316       6     2     1    1    0   0-     8    7
  SCIENCES                                                                                                                    1-     0    1
               INSTL:     7      7     5      2        3      3      0      0             5       6     2     1    1    0   2-     0    0
               INST:      7      7     5      2        3      3      0      0             5       6     2     1    1    0
               (NUMBER REPORTING PEP CATEGORY)

 EDUCATION               43   1256    71      4       12      6      0      0            93       6     3     1    1    0   0-     8    7
                                                                                                                              1-     0    1
               INSTL:     7      7     4      1        1      3      0      0             5       6     3     1    1    0   2-     0    0
               INST:      7      7     4      1        1      3      0      0             5       6     3     1    1    0
               (NUMBER REPORTING PER CATEGORY)

 BUSINESS AND           230   8007   288     27       73    149      0      0           537       6     5     1    1    0   0-     6    7
  COMMERCE                                                                                                                    1-     2    2
               INSTL:     7      8     6      3        2      3      0      0             6       6     5     1    1    0   2-     1    0
               INST:      7      8     6      3        2      3      0      0             6       6     5     1    1    0
               (NUMBER REPORTING PER CATEGORY)

 ALL OTHER               41   5617   576     16      685   1157     72     39          2545       2     0     1    0    0   0-     8    9
                                                                                                                              1-     0    0
               INSTL:     4      5     5      2        4      5      2      2             7       2     0     1    0    0   2-     1    0
               INST:      4      3     5      2        4      5      2      2             6       2     0     1    0    0
               (NUMBER REPORTING PER CATEGORY)
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                    CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                             UNDER A GRANT FROM THE NATIONAL SCIENCE FCUNDATION

                                    SUMMARY OF INSTRUCTIONAL AND RESEARCH USE

   GROUP (PRIVATE:DOCTORATE:ABOVE 20000)

         TOTAL NUMBER OF INSTITUTIONS            =    9      TOTAL NUMBER OF INSTALLATICNS REPORTEC       =   16
         TOTAL NUMBER OF INSTITUTIONS REPORTING =    5      TOTAL NUMBER OF INSTITUTIONS RPTING INSTL    =    5

USE OF OFF-CAMPUS COMPUTERS BY INSTAL:   COOP. CR NON PROFIT    0:   CCLLEGE OR UNIV.    3:   COMMERCIAL    0

                                                                      * LOWEST LEVEL CF RECORC KEEPING *
                 * INSTALLATION FUNCTION *                                        SCHOOL             COURSE    COURSES    INDIVIDUAL
                 NETWORK  NETWORK    LOCAL                   NO                   SCHOOL             COURSE    COURSES    INDIVIDUAL
                   ONLY    & LOCAL    ONLY                RECORDS    CAMPUS     OR COL      DEPT     NUMBER    BY SECT     STUDENTS

         INSTL:     0        4         9                     4          0          3          3         1          1           1
         INST:      0        2         5                     3          0          3          3         1          1           1
         (NUMBER REPORTING PER CATEGORY)

ACADEMIC FIELDS       TOTL STCNT USE, COURSEWK      USE BY FACULTY AND STAFF       *****   MODE/TYPE OF INSTR USE     C   OTHR COMP
 AND DISCIPLINES      **** UNDGR AND GRAD ****      FAC RESRCH  *** OTHER ***      TOTAL   PROB                       O    ON   OFF
                 COURSES STDNTS THOUS$ RESRCH       SPON  N-SPON SFT-DV  MISC      *****   SOLV SIMUL  CAT  CAI  CMI  E   CAMP CAMP

ENGINEERING           76   187   153      2           2      3     0    238        398     4     2    2    1    1  0-     7    9
                                                                                                                  1-     2    0
         INSTL:        3     2     2      1           1      2     0      1          4     4     2    2    1    1  2-     0    1
         INST:         2     1     2      1           1      1     0      1          3     2     2    2    1    1
         (NUMBER REPORTING PER CATEGORY)

ENVIRONMENTAL AND      5   150     0      0           0      0     0    102        102     2     1    1    1    0  0-     3    2
 LIFE SCIENCES                                                                                                    1-     0    1
         INSTL:        1     1     0      0           0      0     0      1          1     2     1    1    1    0  2-     0    0
         INST:         1     1     0      0           0      0     0      1          1     2     1    1    1    0
         (NUMBER REPORTING PER CATEGORY)

COMPUTER              25   600     0      0           0     25     0    112        137     2     2    1    0    0  0-     2    3
 SCIENCES                                                                                                         1-     1    0
         INSTL:        1     1     0      0           0      1     0      1          2     2     2    1    0    0  2-     0    0
         INST:         1     1     0      0           0      1     0      1          2     2     2    1    0    0
         (NUMBER REPORTING PER CATEGORY)

MATHEMATICS AND       30   800    24      0           0     50     0      0         74     2     1    2    0    0  0-     3    3
 STATISTICS                                                                                                       1-     0    0
         INSTL:        2     2     1      0           0      1     0      0          2     2     1    2    0    0  2-     0    0
         INST:         2     2     1      0           0      1     0      0          2     2     1    2    0    0
         (NUMBER REPORTING PER CATEGORY)

PHYSICAL               0     0     3      0           0      0     0    156        159     1     0    1    1    0  0-     2    2
 SCIENCES                                                                                                         1-     1    1
         INSTL:        0     0     1      0           0      0     0      1          2     1     0    1    1    0  2-     0    0
         INST:         0     0     1      0           0      0     0      1          2     1     0    1    1    0
         (NUMBER REPORTING PER CATEGORY)

PSYCHOLOGY             6   165     3      0           0      0     0      0          3     3     1    2    1    1  0-     1    3
                                                                                                                  1-     3    1
         INSTL:        2     2     1      0           0      0     0      0          1     3     1    2    1    1  2-     0    0
         INST:         2     2     1      0           0      0     0      0          1     2     1    1    1    1
         (NUMBER REPORTING PER CATEGORY)

SOCIAL                 0     0    20      0           0      0     0    160        180     1     1    1    0    0  0-     3    3
 SCIENCES                                                                                                         1-     0    0
         INSTL:        0     0     1      0           0      0     0      1          2     1     1    1    0    0  2-     0    0
         INST:         0     0     1      0           0      0     0      1          2     1     1    1    0    0
         (NUMBER REPORTING PER CATEGORY)

EDUCATION              0     0     9      0           0      0     0      8         17     1     1    1    0    0  0-     3    3
                                                                                                                  1-     0    0
         INSTL:        0     0     1      0           0      0     0      1          2     1     1    1    0    0  2-     0    0
         INST:         0     0     1      0           0      0     0      1          2     1     1    1    0    0
         (NUMBER REPORTING PER CATEGORY)

BUSINESS AND          50  2500   247    100           3    100   100    262        812     2     2    1    0    0  0-     3    4
 COMMERCE                                                                                                         1-     1    0
         INSTL:        1     1     2      1           1      1     1      2          3     2     2    1    0    0  2-     0    0
         INST:         1     1     2      1           1      1     1      1          2     2     2    1    0    0
         (NUMBER REPORTING PER CATEGORY)

ALL OTHER              0     0     0      0           0      0     0    120        120     1     0    1    1    0  0-     2    2
                                                                                                                  1-.    0    0
         INSTL:        0     0     0      0           0      0     0      1          1     1     0    1    1    0  2-     0    0
         INST:         0     0     0      0           0      0     0      1          1     1     0    1    1    0
         (NUMBER REPORTING PER CATEGORY)
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IX. SUMMARIES FROM FORM 3 - LINE 3

COMPUTER SCIENCE AND RELATED DEGREE PROGRAMS: STAFF, MAJORS AND DEGREES AWARDED

The following variables and levels were used for summarizing the responses:

Type of Control	Highest Degree Offered	Fall 1975 Enrollment Class
1. Public	1. Associate	1. Less than 500
2. Private	2. Bachelor's	2. 500 - 2,499
	3. Master's	3. 2,500 - 9,999
	4. Doctorate	4. 10,000 -19,999
		5. 20,000 and above

Summaries for the elementary (three-way) groups, the individual levels (one-way) of the control variables, and the total population are presented provided that there are enough institutions included and/or reporting in the category to preclude identification of the institutions involved (i.e. at least two institutions must have reported in a group for the summary of that group to be included).

Each group summary is identified by the levels of the three control variables. For example, group (Public, Associate, Below 500) identifies the summary for all public institutions offering at most the associate degree and having had an enrollment of less than 500 students during Fall 1975. Since all summaries are identical in format, only one will be discussed here as a guide. The total group is chosen for this purpose, i.e., group (, ,), for degree programs within departments.

The first set of summaries for Form 3 - line 3 are by degree program names within departments. The second set are by degree program names only. For group (, ,) in the first set we see that for Computer Science degree programs in Computer Science Departments there were 31 associate degree programs, 100 bachelor's degree programs, 51 master's, and 28 doctoral programs reported for 1976-77. These departments reported that they employed 807 full-time staff, 389 research assistants, 655 teaching assistants and 515 other part-time staff for a total FTE of 1391. They also reported that 293 of their staff had joint appointments with at least one other department. Of the 729 faculty with doctorates, 341 have doctorates in Computer Science and 388 have doctorates in other fields. Thirty two other staff had doctorates in Computer Science and 48 other staff had doctorates in other fields. Fifteen thousand three hundred nineteen (15319) undergraduates and 4215 graduate students were enrolled as majors in these programs during 1976-77. Three hundred seventeen (317) associate degrees, 2449 bachelor's degrees, 363 master's and 119 doctorates were reported awarded in these Computer Sciences programs during 1976-77.

The abbreviations used for degree programs names and departments are as given in the instructions for FORM 3, (see appendix) except that some were added during the editing process (see page V-06 for complete list).

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                                                     SUMMARY BY DEGREE PROGRAMS
         GROUP (          :           :            )
                                                       (AS OF JUNE 30, 1977)

PROGRAM NAME               DEGREE LEVEL AND   *******          S T A F F    *******  MAJORS           DEGREES
  AND DEPARTMENT             YEAR OFFERED     FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED         AWARDED
                            76-77 77-78 78-79  TIME RA-S TA-S OTHR  FTE      COMP-SC OTHR  1976 - 1977      76-77 77-78

BAD PROGRAM               A     1     1     1     0    0    0    1    1 FACULTY    0    0  GRAD      0  A     0     0
IN DEPT OF BAD            B     0     0     0                           OTHER      0    0  UNDGR     0  B     0     0
                          M     0     0     0  NO. JOINT APPTS        0                                 M     0     0
                          D     0     0     0                                                           D     0     0

CEN PROGRAM               A     1     1     1     0    0    0    4    1 FACULTY    0    1  GRAD      0  A     8     8
IN DEPT OF BAD            B     0     0     0                           OTHER      0    0  UNDGR    16  B     0     0
                          M     0     0     0  NO. JOINT APPTS        4                                 M     0     0
                          D     0     0     0                                                           D     0     0

CEN PROGRAM               A     0     0     0     8   15   11    0   34 FACULTY    7    1  GRAD     60  A     0     0
IN DEPT OF CSE            B     1     1     1                           OTHER      0    0  UNDGR   115  B    24    20
                          M     1     1     1  NO. JOINT APPTS        0                                 M     9     6
                          D     1     1     1                                                           D     3     3

CEN PROGRAM               A     0     0     0    46   28   29    9   75 FACULTY   24   20  GRAD    115  A     0     0
IN DEPT OF EEN            B     5     6     7                           OTHER      0    0  UNDGR   365  B    91   102
                          M     4     5     5  NO. JOINT APPTS        1                                 M    31    35
                          D     2     2     3                                                           D     5     6

CEN PROGRAM               A     0     0     0     6    0    4    0    0 FACULTY    0    8  GRAD     30  A     0     0
IN DEPT OF ENG            B     1     1     1                           OTHER      0    0  UNDGR   100  B    10    15
                          M     1     1     1  NO. JOINT APPTS        1                                 M     3    15
                          D     0     0     0                                                           D     0     0

CIS PROGRAM               A     0     0     0     6    0    0    0    6 FACULTY    1    0  GRAD      0  A     0     0
IN DEPT OF BUS            B     1     1     1                           OTHER      0    2  UNDGR    25  B     0     0
                          M     0     0     0  NO. JOINT APPTS        0                                 M     0     0
                          D     0     0     0                                                           D     0     0

CIS PROGRAM               A     2     2     2    44   26   48   32   86 FACULTY   25   13  GRAD    236  A     0    10
IN DEPT OF CIS            B     4     4     4                           OTHER      1    0  UNDGR   645  B   124   154
                          M     2     2     2  NO. JOINT APPTS        6                                 M    75    78
                          D     1     1     1                                                           D     5    14

CPR PROGRAM               A     5     6     6    12    0    3    1   14 FACULTY    0    3  GRAD      0  A    85    97
IN DEPT OF BAD            B     0     0     0                           OTHER      0    1  UNDGR   219  B     0     0
                          M     0     0     0  NO. JOINT APPTS        9                                 M     0     0
                          D     0     0     0                                                           D     0     0

CPR PROGRAM               A     5     5     5    12    0    2   22   21 FACULTY    0    0  GRAD      0  A    77    98
IN DEPT OF BUS            B     0     0     0                           OTHER      0    0  UNDGR   734  B     0     0
                          M     0     0     0  NO. JOINT APPTS        0                                 M     0     0
                          D     0     0     0                                                           D     0     0

CPR PROGRAM               A     2     2     2     2    0    0    7    5 FACULTY    1    1  GRAD      0  A    32    40
IN DEPT OF CIS            B     0     0     0                           OTHER      0    0  UNDGR   132  B     0     0
                          M     0     0     0  NO. JOINT APPTS        0                                 M     0     0
                          D     0     0     0                                                           D     0     0

CPR PROGRAM               A     8     8     8    11    0    0   12   16 FACULTY    0    1  GRAD      0  A    88   105
IN DEPT OF CPR            B     1     1     1                           OTHER      0    0  UNDGR   557  B     9    12
                          M     0     0     0  NO. JOINT APPTS        0                                 M     0     0
                          D     0     0     0                                                           D     0     0

CPR PROGRAM               A     1     1     1     1    0    0    3    2 FACULTY    0    0  GRAD      0  A    15    12
IN DEPT OF CSC            B     0     0     0                           OTHER      0    0  UNDGR    55  B     0     0
                          M     0     0     0  NO. JOINT APPTS        0                                 M     0     0
                          D     0     0     0                                                           D     0     0

CPR PROGRAM               A    11    11    11    43    0   25   35   58 FACULTY    1    1  GRAD      0  A   263   302
IN DEPT OF CPR            B     0     0     0                           OTHER      0    0  UNDGR  2000  B     0     6
                          M     0     0     0  NO. JOINT APPTS        3                                 M     0     0
                          D     0     0     0                                                           D     0     0

CPR PROGRAM               A     2     2     2     9    0    1   23   16 FACULTY    0    1  GRAD      0  A    30    35
IN DEPT OF ISY            B     1     1     1                           OTHER      0    0  UNDGR   330  B    12    11
                          M     0     0     0  NO. JOINT APPTS        0                                 M     0     0
                          D     0     0     0                                                           D     0     0

CPR PROGRAM               A     2     2     2     3    0    0    1    4 FACULTY    0    2  GRAD      0  A     1     2
IN DEPT OF MAT            B     1     1     1                           OTHER      0    0  UNDGR    16  B     0     5
                          M     0     0     0  NO. JOINT APPTS        3                                 M     0     0
                          D     0     0     0                                                           D     0     0

CPR PROGRAM               A     0     0     0     6    5    3    0    7 FACULTY    3    3  GRAD      0  A     0     0
IN DEPT OF SCS            B     1     1     1                           OTHER      0    0  UNDGR    60  B    14     8
                          M     0     0     1  NO. JOINT APPTS        4                                 M     0     0
                          D     0     0     0                                                           D     0     0

CSC PROGRAM               A     7     7     7     9    0    3   14   15 FACULTY    0    4  GRAD      0  A    59    66
IN DEPT OF BAD            B     1     1     1                           OTHER      0    0  UNDGR   180  B     2     2
                          M     0     0     0  NO. JOINT APPTS        5                                 M     0     0
                          D     0     0     0                                                           D     0     0
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                                              SUMMARY BY DEGREE PROGRAMS
      GROUP (        :        :                ) CONTINUED
                                                     (AS OF JUNE 30, 1977)

  PROGRAM NAME         DEGREE LEVEL AND  *******            S T A F F     F        *******  MAJORS             DEGREES
    AND DEPARTMENT      YEAR OFFERED     FULL **PART  TIME**      TOT *** DOCTORATES ***  ENROLLED           AWARDED
                        76-77 77-78 78-79 TIME  RA-S  TA-S  OTHR   FTE      COMP-SC  OTHR  1976 - 1977       76-77 77-78

CSC PROGRAM           A    1     1     1     3     0     0     2     4 FACULTY    0     0  GRAD       0  A     3     8
IN DEPT OF BUS        B    1     2     2                               OTHER      0     0  UNDGR     61  B     3     4
                      M    0     0     0 NO. JOINT APPTS             1                                   M     0     0
                      D    0     0     0                                                                 D     0     0

CSC PROGRAM           A    1     1     1     1     0     0     0     1 FACULTY    0     0  GRAD       0  A     0     0
IN DEPT OF CCS        B    0     0     0                               OTHER      0     0  UNDGR      0  B     0     0
                      M    0     0     0 NO. JOINT APPTS             0                                   M     0     0
                      D    0     0     0                                                                 D     0     0

CSC PROGRAM           A    1     1     1    61    20    29    57   115 FACULTY   21    43  GRAD     231  A     8     0
IN DEPT OF CIS        B    8    11    11                               OTHER      1     0  UNDGR    903  B   185   237
                      M    5     5     6 NO. JOINT APPTS            13                                   M    40    51
                      D    2     2     3                                                                 D     5     6

CSC PROGRAM           A    3     3     3    55    12    18    37    75 FACULTY   13    36  GRAD     339  A   106   119
IN DEPT OF COM        B    7     7     7                               OTHER      0    11  UNDGR    963  B   117   160
                      M    3     3     4 NO. JOINT APPTS            23                                   M    53    68
                      D    0     0     0                                                                 D     0     0

CSC PROGRAM           A   31    31    32   807   389   655   515  1391 FACULTY  341   388  GRAD    4215  A   317   389
IN DEPT OF CSC        B  100   106   108                               OTHER     32    48  UNDGR  15319  B  2449  3031
                      M   51    55    58 NO. JOINT APPTS           293                                   M   868  1000
                      D   28    29    30                                                                 D   119   157

CSC PROGRAM           A    1     1     1     3     0     0     2     3 FACULTY    0     0  GRAD       0  A    11    11
IN DEPT OF CTE        B    0     0     0                               OTHER      0     0  UNDGR     30  B     0     0
                      M    0     0     0 NO. JOINT APPTS             0                                   M     0     0
                      D    0     0     0                                                                 D     0     0

CSC PROGRAM           A    5     5     5    11     1     0     7    17 FACULTY    0     1  GRAD       0  A    87    80
IN DEPT OF DPR        B    0     0     0                               OTHER      1     0  UNDGR    276  B     0     0
                      M    0     0     0 NO. JOINT APPTS             2                                   M     0     0
                      D    0     0     0                                                                 D     0     0

CSC PROGRAM           A    0     0     0    53     0    31    10    67 FACULTY   15    38  GRAD     238  A     0     0
IN DEPT OF EEN        B    2     2     2                               OTHER      3     6  UNDGR    166  B    17    20
                      M    2     2     2 NO. JOINT APPTS             1                                   M     7    10
                      D    1     1     1                                                                 D     1     0

CSC PROGRAM           A    0     0     0     4     0     0     2     5 FACULTY    0     4  GRAD       0  A     0     0
IN DEPT OF ENG        B    1     1     1                               OTHER      0     1  UNDGR    175  B     8    20
                      M    0     0     0 NO. JOINT APPTS             1                                   M     0     0
                      D    0     0     0                                                                 D     0     0

CSC PROGRAM           A    0     0     0     7     0     0     5    10 FACULTY    1     4  GRAD       0  A     0     0
IN DEPT OF ICS        B    2     2     2                               OTHER      0     0  UNDGR    265  B     6    17
                      M    0     0     0 NO. JOINT APPTS             1                                   M     0     0
                      D    0     0     0                                                                 D     0     0

CSC PROGRAM           A    0     0     0     4     0     2     2     6 FACULTY    2     4  GRAD      25  A     0     0
IN DEPT OF IEN        B    2     2     2                               OTHER      1     0  UNDGR     58  B     3     8
                      M    1     1     1 NO. JOINT APPTS             2                                   M     8    10
                      D    1     1     1                                                                 D     2     2

CSC PROGRAM           A   10    10    10    92     5    38    81   143 FACULTY   30    60  GRAD     145  A    11    41
IN DEPT OF MAT        B   27    31    31                               OTHER      1    14  UNDGR   1198  B   186   252
                      M    8    10    10 NO. JOINT APPTS            43                                   M    33    43
                      D    2     2     2                                                                 D     1     8

CSC PROGRAM           A    0     0     0     5     0     0     1     5 FACULTY    2     3  GRAD       0  A     0     0
IN DEPT OF MCS        B    1     1     1                               OTHER      0     0  UNDGR    100  B    20    20
                      M    0     0     0 NO. JOINT APPTS             0                                   M     0     0
                      D    0     0     0                                                                 D     0     0

CSC PROGRAM           A    2     2     2    86     5    17    30   263 FACULTY   21    56  GRAD     152  A     5     7
IN DEPT OF MSC        B   19    19    19                               OTHER      2     2  UNDGR   1368  B   190   255
                      M    5     6     6 NO. JOINT APPTS            15                                   M    42    48
                      D    2     2     2                                                                 D     0     3

CSC PROGRAM           A    1     1     1    61     7    12    29    84 FACULTY   26    41  GRAD      76  A    40    40
IN DEPT OF NEC        B    7     9     9                               OTHER      0     0  UNDGR    667  B   122   176
                      M    3     3     3 NO. JOINT APPTS            49                                   M    13    15
                      D    3     3     3                                                                 D     3     3

CSC PROGRAM           A    0     0     0    42     0    17    15    45 FACULTY   21    13  GRAD     104  A     0     0
IN DEPT OF SCS        B    3     3     3                               OTHER      0     0  UNDGR    859  B   109   125
                      M    3     3     3 NO. JOINT APPTS             2                                   M    22    29
                      D    1     1     1                                                                 D     4     6

CSE PROGRAM           A    0     0     0     0    12     0    10     4 FACULTY    7     3  GRAD      50  A     0     0
IN DEPT OF COM        B    0     0     0                               OTHER      0     0  UNDGR      0  B     0     0
                      M    1     1     1 NO. JOINT APPTS             7                                   M    12    15
                      D    0     0     0                                                                 D     0     0
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                                          SUMMARY BY CEGREE PROGRAMS
      GROUP (        :         :         ) CONTINUED
                                              (AS OF JUNE 30, 1977)

 PROGRAM NAME              DEGREE LEVEL AND    *******         S T A F F          *******  MAJORS          DEGREES
    AND DEPARTMENT           YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED        AWARDED
                           76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE        COMP-SC OTHR  1976 - 1977     76-77 77-78

CSE PROGRAM                A   0     0     0    7    9    4    3   15 FACULTY    0     5  GPAD    29  A    0     0
IN DEPT OF CSC             B   1     1     1                          CTHER      0     0  UNDGR   55  B   72    34
                           M   1     1     1 NO. JOINT APPTS        1                                  M    4     5
                           D   1     1     1                                                           D    2     2

CSE PROGRAM                A   1     1     1   16    8   10    2   26 FACULTY   15     0  GRAD   135  A    5     5
IN DEPT OF CSE             B   1     1     1                          CTHER      0     2  UNDGR  110  B   25    28
                           M   2     2     2 NO. JOINT APPTS        1                                  M   25    25
                           D   1     1     1                                                           D    1     3

CSE PROGRAM                A   0     0     0   53    7   19   34   70 FACULTY    3    24  GRAD   490  A    0     0
IN DEPT OF EEN             B   6     6     6                          CTHER      0     7  UNDGR  914  B  138   216
                           M   4     4     4 NO. JOINT APPTS        1                                  M   96   127
                           D   3     3     3                                                           D   12    16

CSE PROGRAM                A   0     0     0   42    0    0    2   44 FACULTY    5    22  GPAD    50  A    0     0
IN DEPT OF NEC             B   1     1     1                          OTHER      0     4  UNDGR  101  B   22    21
                           M   1     1     1 NO. JOINT APPTS        3                                  M    9    15
                           D   1     1     1                                                           D    3     5

CST PROGRAM                A   1     1     1    2    0    0    0    2 FACULTY    0     0  GRAD     0  A   20    21
IN DEPT OF CCS             B   0     0     0                          CTHER      0     0  UNDGR   67  B    0     0
                           M   0     0     0 NO. JOINT APPTS        0                                  M    0     0
                           D   0     0     0                                                           D    0     0

CST PROGRAM                A   1     1     1    6    0    0    0    6 FACULTY    0     0  GRAD     0  A   23    26
IN DEPT OF COM             B   1     1     1                          OTHER      0     0  UNDGR   97  B   10    18
                           M   0     0     0 NO. JOINT APPTS        0                                  M    0     0
                           D   0     0     0                                                           D    0     0

CST PROGRAM                A   3     3     3    7    0    0    2    8 FACULTY    0     0  GRAD     0  A   20    45
IN DEPT OF CSC             B   0     0     0                          CTHER      0     0  UNDGR   73  B    0     0
                           M   0     0     0 NO. JOINT APPTS        0                                  M    0     0
                           D   0     0     0                                                           D    0     0

CST PROGRAM                A   2     2     2    5    0    2    0    6 FACULTY    0     0  GRAD     0  A   17    27
IN DEPT OF EET             B   0     0     0                          OTHER      0     0  UNDGR  110  B    0     0
                           M   0     0     0 NO. JOINT APPTS        0                                  M    0     0
                           D   0     0     0                                                           D    0     0

CST PROGRAM                A   0     0     0    1    0    0    4    2 FACULTY    0     5  GRAD     0  A    0     0
IN DEPT OF ENG             B   1     1     1                          CTHER      0     0  UNDGR   57  B    7    10
                           M   0     0     0 NO. JOINT APPTS        0                                  M    0     0
                           D   0     0     0                                                           D    0     0

CST PROGRAM                A   0     0     0   10    5    4    0   22 FACULTY    1     3  GRAD    40  A    0     0
IN DEPT OF IEN             B   1     1     1                          CTHER      8     0  UNDGR   37  B    5    37
                           M   1     1     1 NO. JOINT APPTS        3                                  M   15    40
                           D   0     0     0                                                           D    0     0

CST PROGRAM                A   1     1     1    1    0    0    7    3 FACULTY    0     3  GPAD     0  A    0    16
IN DEPT OF MAT             B   0     0     0                          CTHER      0     0  UNDGR   24  B    0     0
                           M   0     0     0 NO. JOINT APPTS        2                                  M    0     0
                           D   0     0     0                                                           D    0     0

CST PRCGRAM                A   1     1     1    1    0    2    0    2 FACULTY    0     0  GRAD     0  A    5     5
IN DEPT OF NEC             B   0     0     0                          OTHER      0     2  UNDGR   10  B    0     0
                           M   0     0     0 NC. JOINT APPTS        0                                  M    0     0
                           D   0     0     0                                                           D    0     0

CTE PROGRAM                A   2     2     2    2    0    6    0    5 FACULTY    0     0  GRAD     0  A    3     5
IN DEPT OF BAC             B   0     0     0                          CTHER      0     0  UNDGR   15  B    0     0
                           M   0     0     0 NO. JOINT APPTS        2                                  M    0     0
                           D   0     0     0                                                           D    0     0

CTE PROGRAM                A   2     2     2    3    0    1    1    3 FACULTY    0     0  GRAD     0  A   10     4
IN DEPT OF CSC             B   0     0     0                          OTHER      0     0  UNDGR  128  B    0     0
                           M   0     0     0 NO. JOINT APPTS        0                                  M    0     0
                           D   0     0     0                                                           D    0     0

CTE PROGRAM                A   8     8     8   21    0    5   31   35 FACULTY    0     2  GRAD     0  A  136   204
IN DEPT OF CTE             B   1     1     1                          CTHER      0     2  UNDGR 1646  B    9     7
                           M   0     0     0 NO. JOINT APPTS        2                                  M    0     0
                           D   0     0     0                                                           D    0     0

DPR PROGRAM                A  34    35    35  105    1   88   58  163 FACULTY   12    11  GRAD    39  A  513   690
IN DEPT OF BAD             B  15    15    15                          OTHER      1     3  UNDGR 5067  B  180   257
                           M   1     1     1 NO. JOINT APPTS       25                                  M   18    20
                           C   1     1     1                                                           D    0     1

DPR PROGRAM                A  14    14    14   32    0   21   31   47 FACULTY    0     4  GRAD     7  A  163   255
IN DEPT OF BUS             B   3     3     3                          CTHER      0     4  UNDGR 1391  B   25    39
                           M   1     1     1 NC. JOINT APPTS        8                                  M    0     1
                           D   0     0     0                                                           D    0     0
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                                              SUMMARY BY DEGREE PROGRAMS
         GROUP I      1        1            ) CONTINUED
                                                 (AS OF JUNE 30, 1977)

 PROGRAM NAME            DEGREE LEVEL AND   *******          S T A F F          *******  MAJORS         DEGREES
   AND DEPARTMENT          YEAR OFFERED     FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED       AWARDED
                         76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE       COMP-SC OTHR  1976 - 1977    76-77 77-78

DPR PROGRAM              A    1     1     2     3    0   16    0    8 FACULTY    0     0  GRAD      0  A    12    15
IN DEPT OF CIS           B    0     0     0                         OTHER      0     0  UNDGR   150  B     0     0
                         M    0     0     0 NO. JOINT APPTS         1                                 M     0     0
                         D    0     0     0                                                           D     0     0

DPR PROGRAM              A    2     2     2     3    0    0    1    3 FACULTY    0     0  GRAD      0  A    17    31
IN DEPT OF COM           B    0     0     0                         OTHER      0     0  UNDGR   108  B     0     0
                         M    0     0     0 NO. JOINT APPTS         1                                 M     0     0
                         D    0     0     0                                                           D     0     0

DPR PROGRAM              A    1     1     1     3    0    0    0    3 FACULTY    3     0  GRAD      0  A    25     0
IN DEPT OF CPR           B    0     0     0                         OTHER      0     0  UNDGR    70  B     0    80
                         M    0     0     0 NO. JOINT APPTS         0                                 M     0     0
                         D    0     0     0                                                           D     0     0

DPR PROGRAM              A    6     6     6    24    1   43   35  155 FACULTY    1     1  GRAD      0  A   127   150
IN DEPT OF CSC           B    1     1     1                         OTHER      0     0  UNDGR  1211  B    25    30
                         M    0     0     0 NO. JOINT APPTS         0                                 M     0     0
                         D    0     0     0                                                           D     0     0

DPR PROGRAM              A    1     1     1     1    0    0    4    2 FACULTY    0     0  GRAD      0  A     8    10
IN DEPT OF CTE           B    0     0     0                         OTHER      0     0  UNDGR    45  B     0     0
                         M    0     0     0 NO. JOINT APPTS         1                                 M     0     0
                         D    0     0     0                                                           D     0     0

DPR PROGRAM              A  110   112   112   345   22   88  351  505 FACULTY    4    17  GRAD      2  A  2080  2429
IN DEPT OF DPR           B    8     8     8                         OTHER      3     8  UNDGR 12937  B   150   213
                         M    0     0     0 NO. JOINT APPTS        56                                 M     0     0
                         D    0     0     0                                                           D     3     0

DPR PROGRAM              A    1     1     1     0    0    3    8    4 FACULTY    3     0  GRAD      0  A    10    25
IN DEPT OF ENG           B    0     0     0                         OTHER      0     0  UNDGR    65  B     0     0
                         M    0     0     0 NO. JOINT APPTS         4                                 M     0     0
                         D    0     0     0                                                           D     0     0

DPR PROGRAM              A    1     1     1     2    0    0    4    3 FACULTY    0     0  GRAD      0  A     0    20
IN DEPT OF ISY           B    0     0     0                         OTHER      0     0  UNDGR   135  B     0     0
                         M    0     0     0 NO. JOINT APPTS         0                                 M     0     0
                         D    0     0     0                                                           D     0     0

DPR PROGRAM              A    1     1     1    25    0    0    5   26 FACULTY    5     0  GRAD      0  A     0     0
IN DEPT OF MAT           B    0     0     0                         OTHER      0     0  UNDGR     0  B     0     0
                         M    0     0     0 NO. JOINT APPTS         0                                 M     0     0
                         D    0     0     0                                                           D     0     0

DPR PROGRAM              A    6     7     7    15    0    0   66  121 FACULTY    0     0  GRAD      0  A   103   137
IN DEPT OF NEC           B    0     0     0                         OTHER      2     0  UNDGR   865  B     0     0
                         M    0     0     0 NO. JOINT APPTS        14                                 M     0     0
                         D    0     0     0                                                           D     0     0

DPR PROGRAM              A    1     1     1     0    0    0    0    0 FACULTY    0     0  GRAD      0  A     0     0
IN DEPT OF SYS           B    0     0     0                         OTHER      0     0  UNDGR     0  B     0     0
                         M    0     0     0 NO. JOINT APPTS         0                                 M     0     0
                         D    0     0     0                                                           D     0     0

EDP PROGRAM              A    1     1     1     1    0    0    6    3 FACULTY    0     0  GRAD      0  A     0     0
IN DEPT OF CPP           B    0     0     0                         OTHER      0     0  UNDGR    15  B     0     0
                         M    0     0     0 NO. JOINT APPTS         0                                 M     0     0
                         D    0     0     0                                                           D     0     0

ICS PROGRAM              A    0     0     0     2    0    0    0    2 FACULTY    1     1  GRAD      0  A     0     0
IN DEPT OF BAD           B    1     1     1                         OTHER      0     0  UNDGR    15  B     8     9
                         M    0     0     0 NO. JOINT APPTS         0                                 M     0     0
                         D    0     0     0                                                           D     0     0

ICS PROGRAM              A    1     1     1     4    0    0    0    4 FACULTY    0     0  GRAD      0  A    16    20
IN DEPT OF CIS           B    0     0     0                         OTHER      0     0  UNDGR    36  B     0     0
                         M    0     0     0 NO. JOINT APPTS         0                                 M     0     0
                         D    0     0     0                                                           D     0     0

ICS PROGRAM              A    1     1     1    42   17   13   34   68 FACULTY    9    18  GRAD    217  A     2     5
IN DEPT OF ICS           B    4     4     4                         OTHER      1     1  UNDGR   777  B   158   200
                         M    2     2     2 NO. JOINT APPTS         4                                 M    70    63
                         D    2     2     2                                                           D     5     4

IPR PROGRAM              A    0     0     0     3    0    0    1    5 FACULTY    0     0  GRAD      0  A     0     0
IN DEPT OF CIS           B    1     1     1                         OTHER      0     1  UNDGR    90  B     5    15
                         M    0     0     0 NO. JOINT APPTS         0                                 M     0     0
                         D    0     0     0                                                           D     0     0

IPR PROGRAM              A    1     1     1    11    0    0    0   11 FACULTY    0     0  GRAD      0  A    19    19
IN DEPT OF IPR           B    0     0     0                         OTHER      0     0  UNDGR   245  B     0     0
                         M    0     0     0 NO. JOINT APPTS         0                                 M     0     0
                         D    0     0     0                                                           D     0     0
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                                                    SUMMARY BY DEGREE PROGRAMS
       GROUP (        :          :               ) CONTINUED
                                                        (AS OF JUNE 30, 1977)

 PROGRAM NAME              DEGREE LEVEL AND    *******        S T A F F          ******* MAJORS           DEGREES
   AND DEPARTMENT           YEAR OFFERED       FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED         AWARDED
                           76-77 77-78 78-79  TIME RA-S TA-S OTHR  FTE       COMP-SC OTHR  1976 - 1977     76-77 77-78

ISC PROGRAM               A   0     0     0    14    8    1   15   21 FACULTY    2     5  GRAD      0  A     0     0
IN DEPT OF BAD            B   2     4     4                            OTHER     0     0  UNDGR   159  B    40    52
                          M   0     0     0  NO. JOINT APPTS        2                                  M     0     0
                          D   0     0     0                                                            D     0     0

ISC PROGRAM               A   0     0     0     6    0    1    0    6 FACULTY    1     1  GRAD      0  A     0     0
IN DEPT OF CSC            B   2     2     2                            OTHER     0     0  UNDGR    55  B     9     7
                          M   0     0     0  NO. JOINT APPTS        0                                  M     0     0
                          D   0     0     0                                                            D     0     0

ISC PROGRAM               A   1     1     1    18    3   11    7   27 FACULTY    7    14  GRAD     22  A     0     0
IN DEPT OF ISC            B   2     2     2                            OTHER     0     0  UNDGR    81  B    20    31
                          M   2     2     2  NO. JOINT APPTS        7                                  M     3     8
                          D   2     2     2                                                            D     3     6

ISC PROGRAM               A   0     0     0     3    0    0    1    3 FACULTY    2     1  GRAD      0  A     0     0
IN DEPT OF ISY            B   1     1     1                            OTHER     0     0  UNDGR    39  B     9     9
                          M   0     0     0  NO. JOINT APPTS        1                                  M     0     0
                          D   0     0     0                                                            D     0     0

ISC PROGRAM               A   0     0     0     1    0    0    0    1 FACULTY    0     1  GRAD      0  A     0     0
IN DEPT OF MAT            B   1     1     1                            OTHER     0     0  UNDGR     0  B     0     0
                          M   0     0     0  NO. JOINT APPTS        1                                  M     0     0
                          D   0     0     0                                                            D     0     0

ISC PROGRAM               A   0     0     0    11    5    0   30   23 FACULTY    1     2  GRAD    316  A     0     0
IN DEPT OF NEC            B   0     0     0                            OTHER     0     0  UNDGR     0  B     0     0
                          M   1     1     1  NO. JOINT APPTS        0                                  M   122   130
                          D   0     0     0                                                            D     0     0

ISY PROGRAM               A   0     0     0    27    2    3    9   35 FACULTY    5    12  GRAD    107  A     0     0
IN DEPT OF BAD            B   6     6     6                            OTHER     0     1  UNDGR   144  B    92    63
                          M   2     2     2  NO. JOINT APPTS        3                                  M    18    21
                          D   1     1     1                                                            D     0     0

ISY PROGRAM               A   0     0     0     3    0    2    2    5 FACULTY    1     0  GRAD      0  A     0     0
IN DEPT OF BUS            B   1     1     1                            OTHER     0     0  UNDGR    13  B     0     4
                          M   0     0     0  NO. JOINT APPTS        0                                  M     0     0
                          D   0     0     0                                                            D     0     0

ISY PROGRAM               A   0     0     0     8    0    0    2    8 FACULTY    2     0  GRAD      0  A     0     0
IN DEPT OF CIS            B   1     1     1                            OTHER     0     0  UNDGR   125  B    25    25
                          M   0     0     0  NO. JOINT APPTS        0                                  M     0     0
                          D   0     0     0                                                            D     0     0

ISY PROGRAM               A   0     0     0     2    0   10    3    6 FACULTY    1     3  GRAD      8  A     0     0
IN DEPT OF COM            B   1     1     1                            OTHER     0     0  UNDGR   105  B    20    25
                          M   1     1     1  NO. JOINT APPTS        0                                  M     7    10
                          D   0     0     0                                                            D     0     0

ISY PROGRAM               A   0     0     0    15    1    4    5   18 FACULTY    6    10  GRAD    102  A     0     0
IN DEPT OF EEN            B   1     1     1                            OTHER     2     0  UNDGR    47  B    16    15
                          M   1     1     1  NO. JOINT APPTS        5                                  M    37    40
                          D   1     1     1                                                            D     8     8

ISY PROGRAM               A   1     1     1     4    0    0    0    4 FACULTY    1     2  GRAD      0  A     1     0
IN DEPT OF ICS            B   1     1     1                            OTHER     0     0  UNDGR    66  B    15    21
                          M   0     0     0  NO. JOINT APPTS        0                                  M     0     0
                          D   0     0     0                                                            D     0     0

ISY PROGRAM               A   0     0     0     4    4    7    5    4 FACULTY    1     4  GRAD     40  A     0     0
IN DEPT OF IEN            B   1     1     1                            OTHER     4     0  UNDGR    59  B    17    16
                          M   1     1     1  NO. JOINT APPTS        0                                  M    15    15
                          D   1     1     1                                                            D     1     2

ISY PROGRAM               A   5     5     4    63   13   52   51  118 FACULTY   27    13  GRAD    174  A    75    99
IN DEPT OF ISY            B  10    10    10                            OTHER     0     6  UNDGR  1373  B   140   183
                          M   2     2     4  NO. JOINT APPTS        9                                  M    31    45
                          D   1     1     1                                                            D     4     5

ISY PROGRAM               A   0     0     0    19    2    7    7   17 FACULTY    7     5  GRAD      0  A     0     0
IN DEPT OF NEC            B   2     2     2                            OTHER     0     0  UNDGR   320  B    65    80
                          M   1     1     1  NO. JOINT APPTS        0                                  M     0     0
                          D   1     1     1                                                            D     0     0

MSC PROGRAM               A   0     0     0    12    0    0    0   12 FACULTY    0     0  GRAD      0  A     0     0
IN DEPT OF CSC            B   1     1     1                            OTHER     2     0  UNDGR   100  B    21    19
                          M   0     0     0  NO. JOINT APPTS        0                                  M     0     0
                          D   0     0     0                                                            D     0     0

NEC PROGRAM               A   0     0     0     6    0    2    2    8 FACULTY    0     0  GRAD     62  A     0     0
IN DEPT OF NEC            B   0     0     0                            OTHER     0     0  UNDGR     0  B     0     0
                          M   1     1     1  NO. JOINT APPTS        0                                  M    31    20
                          D   0     0     0                                                            D     0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
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UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

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                                                        SUMMARY BY DEGREE PROGRAMS
        GROUP (       :          :             ) CONTINUED
                                                       (AS OF JUNE 30, 1977)

 PROGRAM NAME             DEGREE LEVEL AND    *******          S T A F F       *******  MAJORS         DEGREES
   AND DEPARTMENT           YEAR OFFERED      FULL **PART  TIME** TOT *** DOCTORATES ***  ENROLLED       AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE         COMP-SC OTHR  1976 - 1977    76-77 77-78

OTH PROGRAM               A   4     4     4    26    9   16   17   70 FACULTY    3   14  GRAD     98  A     8    25
IN DEPT OF BAD            B   4     4     4                           OTHER      0    2  UNDGR   795  B    78    99
                          M   2     2     2  NO. JOINT APPTS      2                                     M    14    18
                          D   2     2     2                                                             D     1     3

OTH PROGRAM               A   1     1     0    16    0    0    4   18 FACULTY    1    5  GRAD     20  A    31    40
IN DEPT OF CIS            B   1     1     3                           OTHER      0    0  UNDGR   320  B     0     0
                          M   0     0     1  NO. JOINT APPTS      2                                     M     0     0
                          D   0     0     0                                                             D     0     0

OTH PROGRAM               A   0     0     0    10    0    0    4   12 FACULTY    0    4  GRAD      0  A     0     6
IN DEPT OF COM            B   3     4     4                           OTHER      0    0  UNDGR    80  B     5    27
                          M   0     0     0  NO. JOINT APPTS      4                                     M     0     0
                          D   0     0     0                                                             D     0     0

OTH PROGRAM               A   1     1     1     9    8    5    2   13 FACULTY    0    6  GRAD     12  A     0     2
IN DEPT OF CSC            B   1     1     1                           OTHER      1    0  UNDGR     3  B     0     0
                          M   1     1     1  NO. JOINT APPTS      2                                     M     8     7
                          D   1     1     1                                                             D     0     3

OTH PROGRAM               A   1     1     1     1    0    0    1    1 FACULTY    0    0  GRAD      0  A    13    13
IN DEPT OF CTE            B   0     0     0                           OTHER      0    0  UNDGR    49  B     0     0
                          M   0     0     0  NO. JOINT APPTS      1                                     M     0     0
                          D   0     0     0                                                             D     0     0

OTH PROGRAM               A   3     3     3     5    0    9    1   10 FACULTY    0    0  GRAD      0  A    50    50
IN DEPT OF CPR            B   0     0     0                           OTHER      1    0  UNDGR   239  B     0     0
                          M   0     0     0  NO. JOINT APPTS      0                                     M     0     0
                          D   0     0     0                                                             D     0     0

OTH PROGRAM               A   0     0     0    29   27   14   36   60 FACULTY    9   23  GRAD    101  A     0     0
IN DEPT OF EEN            B   3     3     3                           OTHER      0    5  UNDGR   302  B    50    56
                          M   2     2     2  NO. JOINT APPTS     13                                     M    38    38
                          D   3     3     3                                                             D     6     5

OTH PROGRAM               A   1     1     1    10    0    0    4   14 FACULTY    0    0  GRAD      0  A     0     0
IN DEPT OF EFT            B   0     0     0                           OTHER      0    0  UNDGR     0  B     0     0
                          M   0     0     0  NO. JOINT APPTS      0                                     M     0     0
                          D   0     0     0                                                             D     0     0

OTH PROGRAM               A   0     0     0     2    0    4    0    1 FACULTY    0    1  GRAD      0  A     0     0
IN DEPT OF ENG            B   0     1     1                           OTHER      0    0  UNDGR    12  B     3     6
                          M   0     0     0  NO. JOINT APPTS      0                                     M     0     0
                          D   0     0     0                                                             D     0     0

OTH PROGRAM               A   0     0     0     2    0    0    3    3 FACULTY    0    2  GRAD      0  A     0     0
IN DEPT OF ISY            B   1     1     1                           OTHER      0    0  UNDGR    65  B     0     0
                          M   0     0     0  NO. JOINT APPTS      1                                     M     0     0
                          D   0     0     0                                                             D     0     0

OTH PROGRAM               A   2     2     2    34    2    8    7   38 FACULTY    1   20  GRAD      0  A     2     4
IN DEPT OF MAT            B   8     8     9                           OTHER      0    2  UNDGR   181  B    35    52
                          M   0     0     0  NO. JOINT APPTS      4                                     M     0     0
                          D   0     0     0                                                             D     0     0

OTH PROGRAM               A   0     0     0    28    0   21    0   33 FACULTY    3   22  GRAD     42  A     0     0
IN DEPT OF MSC            B   4     4     4                           OTHER      0    0  UNDGR   112  B    29    30
                          M   1     1     1  NO. JOINT APPTS      8                                     M     9     5
                          D   1     1     1                                                             D     1     4

OTH PROGRAM               A   1     1     1    28    5    1   33   39 FACULTY   11   26  GRAD    100  A    20    25
IN DEPT OF NEC            B   5     5     6                           OTHER      1    7  UNDGR   473  B    64    86
                          M   3     3     3  NO. JOINT APPTS      7                                     M    19    21
                          D   1     1     1                                                             D     0     0

OTH PROGRAM               A   0     0     0     0    0    0    6    4 FACULTY    0    0  GRAD      0  A     0     0
IN DEPT OF SCS            B   1     1     1                           OTHER      0    6  UNDGR     0  B     0     0
                          M   0     0     0  NO. JOINT APPTS      6                                     M     0     0
                          D   0     0     0                                                             D     0     0

SAN PROGRAM               A   1     1     1     2    0    0    0    2 FACULTY    0    0  GRAD      0  A     5     5
IN DEPT OF BAD            B   0     0     0                           OTHER      0    0  UNDGR    20  B     0     0
                          M   0     0     0  NO. JOINT APPTS      0                                     M     0     0
                          D   0     0     0                                                             D     0     0

SAN PROGRAM               A   0     0     0    10    0    0    2   11 FACULTY    0    0  GRAD      0  A     0     0
IN DEPT OF SAN            B   1     1     1                           OTHER      0    0  UNDGR   356  B    72    99
                          M   0     0     0  NO. JOINT APPTS      0                                     M     0     0
                          D   0     0     0                                                             D     0     0

SCE PROGRAM               A   0     0     0     5    1    3    8    9 FACULTY    5    1  GRAD     20  A     0     0
IN DEPT OF ENG            B   1     1     1                           OTHER      0    0  UNDGR   100  B    18    25
                          M   1     1     1  NO. JOINT APPTS      3                                     M    10    20
                          D   0     0     0                                                             D     0     0
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                                UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                               PAGE IX-09

                                                       SUMMARY BY DEGREE PROGRAMS
        GROUP (          ;          ;             ) CONTINUED
                                                         (AS OF JUNE 30, 1977)

  PROGRAM NAME              DEGREE LEVEL AND    *******          S T A F F          ******* MAJORS             DEGREES
    AND DEPARTMENT            YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED           AWARDED
                            76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE       COMP-SC OTHR 1976 - 1977      76-77 77-78

 SCS PROGRAM                A   0     0     0    9    0    2    4   14 FACULTY     1     5 GRAD       0 A      0     0
 IN DEPT OF SCS             B   1     1     1                          OTHER       0     0 UNDGR    125 B     43    50
                            M   0     0     1 NO. JOINT APPTS        2                                  M      0     0
                            D   0     0     0                                                           D      0     0

 SEN PROGRAM                A   0     0     0    0    0    0    3    1 FACULTY     0     2 GRAD       2 A      0     0
 IN DEPT OF ENG             B   0     0     0                          OTHER       0     0 UNDGR      0 B      0     0
                            M   1     1     1 NO. JOINT APPTS        0                                  M      2     4
                            D   0     0     0                                                           D      0     0

 SEN PROGRAM                A   0     0     0    5    4    2    0    6 FACULTY     0     4 GRAD      20 A      0     0
 IN DEPT OF IEN             B   1     1     1                          OTHER       0     0 UNDGR     85 B     21    20
                            M   1     1     1 NO. JOINT APPTS        0                                  M     13    15
                            D   0     0     0                                                           D      0     0

 SIS PROGRAM                A   0     0     0    2    0    0    0    2 FACULTY     1     3 GRAD       0 A      0     0
 IN DEPT OF IEN             B   1     1     1                          OTHER       0     0 UNDGR    108 B     23    35
                            M   0     0     0 NO. JOINT APPTS        0                                  M      0     0
                            D   0     0     0                                                           D      0     0

 SIS PROGRAM                A   0     0     0    6    2   12   10    8 FACULTY     4     2 GRAD      25 A      0     0
 IN DEPT OF SIS             B   1     1     1                          OTHER       0     0 UNDGR    100 B     30    35
                            M   1     1     1 NO. JOINT APPTS        2                                  M      3     3
                            D   1     1     1                                                           D      2     2

 SYS PROGRAM                A   0     0     0    0    0    0   20    6 FACULTY     3    16 GRAD      26 A      0     0
 IN DEPT OF CSC             B   0     0     0                          OTHER       0     0 UNDGR      0 B      0     0
                            M   1     1     1 NO. JOINT APPTS       20                                  M      2     3
                            D   0     0     0                                                           D      0     0

 SYS PROGRAM                A   0     0     0    5    0    0    6    8 FACULTY     0     3 GRAD       4 A      0     0
 IN DEPT OF SYS             B   1     1     1                          OTHER       0     0 UNDGR    180 B     70    75
                            M   1     1     1 NO. JOINT APPTS        1                                  M      0     1
                            D   0     0     0                                                           D      0     0

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                                                       SUMMARY BY DEGREE PROGRAMS
        GROUP (PUBLIC ;ASSOCIATE;BELOW 500    )
                                                         (AS OF JUNE 30, 1977)

  PROGRAM NAME              DEGREE LEVEL AND    *******          S T A F F          ******* MAJORS             DEGREES
    AND DEPARTMENT            YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED           AWARDED
                            76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE       COMP-SC OTHR 1976 - 1977      76-77 77-78

 CPR PROGRAM                A   1     1     1    1    0    0    0    1 FACULTY     0     0 GRAD       0 A      5     6
 IN DEPT OF CPR             B   0     0     0                          OTHER       0     0 UNDGR      5 B      0     0
                            M   0     0     0 NO. JOINT APPTS        0                                  M      0     0
                            D   0     0     0                                                           D      0     0

 CSC PROGRAM                A   1     1     1    3    0    0    2    3 FACULTY     0     0 GRAD       0 A     11    11
 IN DEPT OF CTE             B   0     0     0                          OTHER       0     0 UNDGR     30 B      0     0
                            M   0     0     0 NO. JOINT APPTS        0                                  M      0     0
                            D   0     0     0                                                           D      0     0
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                                                      SUMMARY BY DEGREE PROGRAMS
         GROUP (PUBLIC :ASSOCIATE:500-2499     )
                                                        (AS OF JUNE 30, 1977)

PROGRAM NAME               DEGREE LEVEL AND    *******          S T A F F        ******* MAJORS          DEGREES
   AND DEPARTMENT            YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED      AWARDED
                           76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE       COMP-SC OTHR  1976 - 1977    76-77 77-78

BAD PROGRAM                A   1     1     1    0    0    0    1    1 FACULTY    0     0  GRAD      0  A    0     0
IN DEPT OF BAD             B   0     0     0                          OTHER      0     0  UNDGR     0  B    0     0
                           M   0     0     0 NO. JOINT APPTS        0                                  M    0     0
                           D   0     0     0                                                           D    0     0

CPR PROGRAM                A   2     2     2    4    0    2    2    6 FACULTY    0     0  GRAD      0  A   19    28
IN DEPT OF BUS             B   0     0     0                          OTHER      0     0  UNDGR    8C  B    0     0
                           M   0     0     0 NO. JOINT APPTS        0                                  M    0     0
                           D   0     0     0                                                           D    0     0

CPR PROGRAM                A   3     3     3    4    0    0    5    5 FACULTY    0     1  GRAD      0  A   31    34
IN DEPT OF CPR             B   0     0     0                          OTHER      0     0  UNDGR   257  B    0     0
                           M   0     0     0 NO. JOINT APPTS        0                                  M    0     0
                           D   0     0     0                                                           D    0     0

CPR PROGRAM                A   1     1     1    1    0    0    3    2 FACULTY    0     0  GRAD      0  A   15    12
IN DEPT OF CSC             B   0     0     0                          OTHER      0     0  UNDGR    55  B    0     0
                           M   0     0     0 NO. JOINT APPTS        0                                  M    0     0
                           D   0     0     0                                                           D    0     0

CPR PROGRAM                A   3     3     3    7    0    3    6    9 FACULTY    0     1  GRAD      0  A   51    48
IN DEPT OF CPR             B   0     0     0                          OTHER      0     0  UNDGR    94  B    0     6
                           M   0     0     0 NO. JOINT APPTS        0                                  M    0     0
                           D   0     0     0                                                           D    0     0

CSC PROGRAM                A   1     1     1    2    0    0    1    3 FACULTY    0     0  GRAD      0  A   25    20
IN DEPT OF BAD             B   0     0     0                          OTHER      0     0  UNDGR    55  B    0     0
                           M   0     0     0 NO. JOINT APPTS        1                                  M    0     0
                           D   0     0     0                                                           D    0     0

CSC PROGRAM                A   1     1     1    1    0    0    0    1 FACULTY    0     0  GRAD      0  A    3     8
IN DEPT OF BUS             B   0     0     0                          OTHER      0     0  UNDGR    47  B    0     0
                           M   0     0     0 NO. JOINT APPTS        1                                  M    0     0
                           D   0     0     0                                                           D    0     0

CSC PROGRAM                A   1     1     1   11    0    5    0   14 FACULTY    0     6  GRAD      0  A    1    10
IN DEPT OF COM             B   0     0     0                          OTHER      0     0  UNDGR    27  B    0     0
                           M   0     0     0 NO. JOINT APPTS        0                                  M    0     0
                           D   0     0     0                                                           D    0     0

CSC PROGRAM                A   6     6     6   13    2    3    2   13 FACULTY    0     0  GRAD      0  A  100   101
IN DEPT OF CSC             B   0     0     0                          OTHER      0     0  UNDGR   328  B    0     0
                           M   0     0     0 NO. JOINT APPTS        8                                  M    0     0
                           D   0     0     0                                                           D    0     0

CSC PROGRAM                A   2     2     2    2    1    0    1    4 FACULTY    0     1  GRAD      0  A    5     5
IN DEPT OF OPR             B   0     0     0                          OTHER      1     0  UNDGR    17  B    0     0
                           M   0     0     0 NO. JOINT APPTS        2                                  M    0     0
                           D   0     0     0                                                           D    0     0

CSC PROGRAM                A   1     1     1    0    0    0    0    0 FACULTY    0     0  GRAD      0  A    0     2
IN DEPT OF MSC             B   0     0     0                          OTHER      0     0  UNDGR     4  B    0     0
                           M   0     0     0 NO. JOINT APPTS        0                                  M    0     0
                           D   0     0     0                                                           D    0     0

CSE PROGRAM                A   1     1     1    1    0    0    2    2 FACULTY    0     0  GRAD      0  A    5     5
IN DEPT OF CSE             B   0     0     0                          OTHER      0     2  UNDGR    15  B    0     0
                           M   0     0     0 NO. JOINT APPTS        1                                  M    0     0
                           D   0     0     0                                                           D    0     0

CST PROGRAM                A   2     2     2    4    0    0    2    5 FACULTY    0     0  GRAD      0  A   13    35
IN DEPT OF CSC             B   0     0     0                          OTHER      0     0  UNDGR    43  B    0     0
                           M   0     0     0 NO. JOINT APPTS        0                                  M    0     0
                           D   0     0     0                                                           D    0     0

CTE PROGRAM                A   3     3     3    3    0    0    3    4 FACULTY    0     0  GRAD      0  A   24    41
IN DEPT OF CTE             B   0     0     0                          OTHER      0     0  UNDGR   135  B    0     0
                           M   0     0     0 NO. JOINT APPTS        1                                  M    0     0
                           D   0     0     0                                                           D    0     0

DPR PROGRAM                A   6     6     6    9    0    4    2   11 FACULTY    0     0  GRAD      0  A   45    79
IN DEPT OF EAC             B   0     0     0                          OTHER      0     0  UNDGR   327  B    0     0
                           M   0     0     0 NO. JOINT APPTS       16                                  M    0     0
                           D   0     0     0                                                           D    0     0

DPR PROGRAM                A   7     7     7    8    0    8   10   15 FACULTY    0     0  GRAD      0  A   38    73
IN DEPT OF BUS             B   0     0     0                          OTHER      0     0  UNDGR   329  B    0     0
                           M   0     0     0 NO. JOINT APPTS        2                                  M    0     0
                           D   0     0     0                                                           D    0     0

DPR PROGRAM                A   0     0     1    0    0    4    0    2 FACULTY    0     0  GRAD      0  A    0     0
IN DEPT OF CIS             B   0     0     0                          OTHER      0     0  UNDGR    20  B    0     0
                           M   0     0     0 NO. JOINT APPTS        1                                  M    0     0
                           D   0     0     0                                                           D    0     0
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INVENTORY OF COMPUTERS, APPLICATIONS CF COMPUTERS, ANC INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                           UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                               SUMMARY BY CEGREE PROGRAMS
         GROUP (PUBLIC :ASSOCIATE:500-2499      ) CONTINUED
                                                  (AS OF JUNE 30, 1977)

 PROGRAM NAME           CEGREE LEVEL AND    *******          S T A F F           *******  MAJORS           DEGREES
   AND DEPARTMENT         YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED         AWARDED
                        76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE       COMP-SC OTHR  1976 - 1977      76-77 77-78

DPR PROGRAM             A   1     1     1    2    0    0    1    2 FACULTY    0     0  GRAD      0  A    15    20
IN DEPT OF COM          B   0     0     0                          OTHER      0     0  UNDGR    57  B     0     0
                        M   0     0     0 NO. JOINT APPTS          1                                M     0     0
                        D   0     0     0                                                           D     0     0

DPR PROGRAM             A   1     1     1    3    0    0    0    3 FACULTY    3     0  GRAD      0  A    25     0
IN DEPT OF CPR          B   0     0     0                          CTHER      0     0  UNOGR    70  B     0    80
                        M   0     0     0 NO. JOINT APPTS          0                                M     0     0
                        D   0     0     0                                                           D     0     0

DPR PROGRAM             A  36    37    37   62    0   29   24   77 FACULTY    0     1  GRAD      2  A   338   406
IN DEPT OF DPR          B   0     0     0                          OTHER      0     0  UNDGR  2018  B     0     0
                        M   0     0     0 NO. JOINT APPTS         22                                M     0     0
                        D   0     0     0                                                           D     0     0

OTH PROGRAM             A   2     2     2    5    0    0    1    5 FACULTY    0     0  GRAD      0  A     0     0
IN DEPT OF BAD          B   0     0     0                          CTHER      0     0  UNDGR   140  B     0     0
                        M   0     0     0 NO. JOINT APPTS          0                                M     0     0
                        D   0     0     0                                                           D     0     0

OTH PRCGRAM             A   1     1     1    1    0    0    1    1 FACULTY    0     0  GRAD      0  A    13    13
IN DEPT OF CTF          B   0     0     0                          OTHER      0     0  UNDGR    49  B     0     0
                        M   0     0     0 NO. JOINT APPTS          1                                M     0     0
                        D   0     0     0                                                           D     0     0

OTH PROGRAM             A   1     1     1    2    0    1    0    3 FACULTY    0     0  GRAD      0  A    15    15
IN DEPT OF CPR          B   0     0     0                          CTHER      0     0  UNDGR    50  B     0     0
                        M   0     0     0 NO. JOINT APPTS          0                                M     0     0
                        D   0     0     0                                                           D     0     0
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      INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                    CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                 PAGE IX-12

                                                         SUMMARY BY DEGREE PROGRAMS
        GROUP (PUBLIC ;ASSOCIATE;2500-9999    )
                                                         (AS OF JUNE 30, 1977)

   PROGRAM NAME           DEGREE LEVEL AND   *******          S T A F F       *******  MAJORS             DEGREES
     AND DEPARTMENT         YEAR OFFERED     FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED           AWARDED
                           76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE     COMP-SC OTHR  1976 - 1977        76-77 77-78

CPR PROGRAM          A    2    3    3     6    0    0    0    6 FACULTY    0    0  GRAD      0  A    41    45
IN DEPT OF BAC       B    0    0    0                           OTHER      0    0  UNDGR   145  B     0     0
                     M    0    0    0 NO. JOINT APPTS          0                                 M     0     0
                     D    0    0    0                                                            D     0     0

CPR PROGRAM          A    3    3    3     8    0    0   20   15 FACULTY    0    0  GRAD      0  A    58    70
IN DEPT OF BUS       B    0    0    0                           OTHER      0    0  UNDGR   654  B     0     0
                     M    0    0    0 NO. JOINT APPTS          0                                 M     0     0
                     D    0    0    0                                                            D     0     0

CPR PROGRAM          A    1    1    1     2    0    0    2    3 FACULTY    0    0  GRAD      0  A    20    20
IN DEPT OF CIS       B    0    0    0                           OTHER      0    0  UNDGR    50  B     0     0
                     M    0    0    0 NO. JOINT APPTS          0                                 M     0     0
                     D    0    0    0                                                            D     0     0

CPR PROGRAM          A    2    2    2     1    0    0    2    3 FACULTY    0    0  GRAD      0  A    14    18
IN DEPT OF CPR       B    0    0    0                           OTHER      0    0  UNDGR    72  B     0     0
                     M    0    0    0 NO. JOINT APPTS          0                                 M     0     0
                     D    0    0    0                                                            D     0     0

CPR PROGRAM          A    7    7    7    28    0    0   26   29 FACULTY    0    0  GRAD      0  A   172   204
IN DEPT OF DPR       B    0    0    0                           OTHER      0    0  UNDGR   907  B     0     0
                     M    0    0    0 NO. JOINT APPTS          3                                 M     0     0
                     D    0    0    0                                                            D     0     0

CPR PROGRAM          A    1    1    1     3    0    0    5    6 FACULTY    0    0  GRAD      0  A    30    35
IN DEPT OF ISY       B    0    0    0                           OTHER      0    0  UNDGR   125  B     0     0
                     M    0    0    0 NO. JOINT APPTS          0                                 M     0     0
                     D    0    0    0                                                            D     0     0

CSC PROGRAM          A    1    1    1     1    0    0    0    1 FACULTY    0    0  GRAD      0  A     4     3
IN DEPT OF BAD       B    0    0    0                           OTHER      0    0  UNDGR    30  B     0     0
                     M    0    0    0 NO. JOINT APPTS          0                                 M     0     0
                     D    0    0    0                                                            D     0     0

CSC PROGRAM          A    1    1    1     2    0    0    4    5 FACULTY    0    1  GRAD      0  A     0     0
IN DEPT OF CIS       B    0    0    0                           OTHER      0    0  UNDGR     0  B     0     0
                     M    0    0    0 NO. JOINT APPTS          2                                 M     0     0
                     D    0    0    0                                                            D     0     0

CSC PROGRAM          A    1    1    1     3    0    0    0    3 FACULTY    0    0  GRAD      0  A    95    99
IN DEPT OF COM       B    0    0    0                           OTHER      0    0  UNDGR   300  B     0     0
                     M    0    0    0 NO. JOINT APPTS          0                                 M     0     0
                     D    0    0    0                                                            D     0     0

CSC PROGRAM          A    5    5    5    17    0    6   13   23 FACULTY    0    1  GRAD      0  A    81   100
IN DEPT OF CSC       B    0    0    0                           OTHER      0    0  UNDGR   440  B     0     0
                     M    0    0    0 NO. JOINT APPTS          0                                 M     0     0
                     D    0    0    0                                                            D     0     0

CSC PROGRAM          A    2    2    2     8    0    0    2    9 FACULTY    0    0  GRAD      0  A    62    55
IN DEPT OF DPR       B    0    0    0                           OTHER      0    0  UNDGR   184  B     0     0
                     M    0    0    0 NO. JOINT APPTS          0                                 M     0     0
                     D    0    0    0                                                            D     0     0

CSC PROGRAM          A    2    2    2     2    0    0   11    4 FACULTY    0    0  GRAD      0  A     2     2
IN DEPT OF MAT       B    0    0    0                           OTHER      0    0  UNDGR    31  B     0     0
                     M    0    0    0 NO. JOINT APPTS          0                                 M     0     0
                     D    0    0    0                                                            D     0     0

CSC PROGRAM          A    1    1    1     3    0    1    0    3 FACULTY    0    0  GRAD      0  A    40    40
IN DEPT OF NEC       B    0    0    0                           OTHER      0    0  UNDGR    45  B     0     0
                     M    0    0    0 NO. JOINT APPTS          0                                 M     0     0
                     D    0    0    0                                                            D     0     0

CST PROGRAM          A    1    1    1     2    0    0    0    2 FACULTY    0    0  GRAD      0  A    20    21
IN DEPT OF CCS       B    0    0    0                           OTHER      0    0  UNDGR    67  B     0     0
                     M    0    0    0 NO. JOINT APPTS          0                                 M     0     0
                     D    0    0    0                                                            D     0     0

CTE PROGRAM          A    1    1    1     2    0    0    0    2 FACULTY    0    0  GRAD      0  A     4     4
IN DEPT OF CSC       B    0    0    0                           OTHER      0    0  UNDGR    88  B     0     0
                     M    0    0    0 NO. JOINT APPTS          0                                 M     0     0
                     D    0    0    0                                                            D     0     0

CTE PROGRAM          A    2    2    2     7    0    2   17   14 FACULTY    0    0  GRAD      0  A    53   104
IN DEPT OF CTE       B    0    0    0                           OTHER      0    0  UNDGR   680  B     0     0
                     M    0    0    0 NO. JOINT APPTS          1                                 M     0     0
                     D    0    0    0                                                            D     0     0

DPR PROGRAM          A   15   16   16    42    0   32   25   55 FACULTY    4    0  GRAD      0  A   248   324
IN DEPT OF BAD       B    0    0    0                           OTHER      1    0  UNDGR  1840  B     0     0
                     M    0    0    0 NO. JOINT APPTS          3                                 M     0     0
                     D    0    0    0                                                            D     0     0
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                                         SUMMARY BY DEGREE PROGRAMS
      GROUP (PUBLIC :ASSOCIATE:2500-9999    ) CONTINUED
                                              (AS OF JUNE 30, 1977)

PROGRAM NAME              DEGREE LEVEL AND  *******          S T A F F        *******  MAJORS             DEGREES
   AND DEPARTMENT          YEAR OFFERED     FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED          AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE      COMP-SC OTHR 1976 - 1977        76-77 77-78

DPR PROGRAM              A   4     4     4     8    0   12    5   12 FACULTY    0    0 GRAD      0  A    67   107
IN DEPT OF BUS           B   0     0     0                          OTHER      0    0 UNDGR   471  B     0     0
                         M   0     0     0  NO. JOINT APPTS          0                             M     0     0
                         D   0     0     0                                                         D     0     0

DPR PROGRAM              A   1     1     1     3    0   12    0    6 FACULTY    0    0 GRAD      0  A    12    15
IN DEPT OF CIS           B   0     0     0                          OTHER      0    0 UNDGR   130  B     0     0
                         M   0     0     0  NO. JOINT APPTS          0                             M     0     0
                         D   0     0     0                                                         D     0     0

DPR PROGRAM              A   3     3     3    11    0    5   10   13 FACULTY    0    1 GRAD      0  A    42    45
IN DEPT OF CSC           B   0     0     0                          OTHER      0    0 UNDGR   341  B     0     0
                         M   0     0     0  NO. JOINT APPTS          0                             M     0     0
                         D   0     0     0                                                         D     0     0

DPR PROGRAM              A   1     1     1     1    0    0    4    2 FACULTY    0    0 GRAD      0  A     8    10
IN DEPT OF CTE           B   0     0     0                          OTHER      0    0 UNDGR    45  B     0     0
                         M   0     0     0  NO. JOINT APPTS          1                             M     0     0
                         D   0     0     0                                                         D     0     0

DPR PROGRAM              A  48    49    49   148   18   39  142  243 FACULTY    1    5 GRAD      0  A   995  1191
IN DEPT OF DPR           B   0     0     0                          OTHER      3    0 UNDGR  6345  B     0     0
                         M   0     0     0  NO. JOINT APPTS         18                             M     0     0
                         D   0     0     0                                                         D     3     0

DPR PROGRAM              A   2     2     2     4    0    0   21  100 FACULTY    0    0 GRAD      0  A    32    55
IN DEPT OF NEC           B   0     0     0                          OTHER      1    0 UNDGR   409  B     0     0
                         M   0     0     0  NO. JOINT APPTS          2                             M     0     0
                         D   0     0     0                                                         D     0     0

EDP PROGRAM              A   1     1     1     1    0    0    6    3 FACULTY    0    0 GRAD      0  A     0     0
IN DEPT OF CPR           B   0     0     0                          OTHER      0    0 UNDGR    15  B     0     0
                         M   0     0     0  NO. JOINT APPTS          0                             M     0     0
                         D   0     0     0                                                         D     0     0

IPR PROGRAM              A   1     1     1    11    0    0    0   11 FACULTY    0    0 GRAD      0  A    19    19
IN DEPT OF IPR           B   0     0     0                          OTHER      0    0 UNDGR   245  B     0     0
                         M   0     0     0  NO. JOINT APPTS          0                             M     0     0
                         D   0     0     0                                                         D     0     0

OTH PROGRAM              A   2     2     2     2    0    0    0   32 FACULTY    0    0 GRAD      0  A     2    10
IN DEPT OF BAD           B   0     0     0                          OTHER      0    0 UNDGR    86  B     0     0
                         M   0     0     0  NO. JOINT APPTS          0                             M     0     0
                         D   0     0     0                                                         D     0     0

OTH PROGRAM              A   2     2     2     3    0    8    1    7 FACULTY    0    0 GRAD      0  A    35    35
IN DEPT OF DPR           B   0     0     0                          OTHER      1    0 UNDGR   189  B     0     0
                         M   0     0     0  NO. JOINT APPTS          0                             M     0     0
                         D   0     0     0                                                         D     0     0

OTH PROGRAM              A   1     1     1     2    0    0   12    5 FACULTY    1    0 GRAD      0  A    20    25
IN DEPT OF NEC           B   0     0     0                          OTHER      1    0 UNDGR   198  B     0     0
                         M   0     0     0  NO. JOINT APPTS          0                             M     0     0
                         D   0     0     0                                                         D     0     0
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                                                         SUMMARY BY DEGREE PROGRAMS
            GROUP (PUBLIC :ASSOCIATE:10,000-19,999)
                                                           (AS OF JUNE 30, 1977)

 PROGRAM NAME            DEGREE LEVEL AND    *******         S T A F F          *******  MAJORS           DEGREES
    AND DEPARTMENT        YEAR OFFERED       FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED         AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE      COMP-SC OTHR  1976 - 1977     76-77 77-78

CPR PROGRAM               A   1     1     1    3    0    0    0    3 FACULTY    0     0 GRAD      0 A     0     0
IN DEPT OF BAD            B   0     0     0                          OTHER      0     0 UNDGR     0 B     0     0
                          M   0     0     0  NO. JOINT APPTS         2                                M     0     0
                          D   0     0     0                                                           D     0     0

CSC PROGRAM               A   1     1     1    3    0    0    8    5 FACULTY    0     0 GRAD      0 A    15    25
IN DEPT OF BAD            B   0     0     0                          OTHER      0     0 UNDGR    30 B     0     0
                          M   0     0     0  NO. JOINT APPTS         0                                M     0     0
                          D   0     0     0                                                           D     0     0

CSC PROGRAM               A   4     4     4   12    0    4   28   24 FACULTY    0     1 GRAD      0 A    41    57
IN DEPT OF CSC            B   0     0     0                          OTHER      0     0 UNDGR   615 B     0     0
                          M   0     0     0  NO. JOINT APPTS         2                                M     0     0
                          D   0     0     0                                                           D     0     0

CSC PROGRAM               A   1     1     1    0    0    0    2    1 FACULTY    0     0 GRAD      0 A     1     5
IN DEPT OF MAT            B   0     0     0                          OTHER      0     1 UNDGR     7 B     0     0
                          M   0     0     0  NO. JOINT APPTS         1                                M     0     0
                          D   0     0     0                                                           D     0     0

DPR PROGRAM               A   3     3     3    6    0   21    0   27 FACULTY    0     1 GRAD      0 A    22    30
IN DEPT OF BAD            B   0     0     0                          OTHER      0     0 UNDGR   601 B     0     0
                          M   0     0     0  NO. JOINT APPTS         0                                M     0     0
                          D   0     0     0                                                           D     0     0

DPR PROGRAM               A   2     2     2    8    1   16   12  126 FACULTY    0     0 GRAD      0 A    60    70
IN DEPT OF CSC            B   0     0     0                          OTHER      0     0 UNDGR   600 B     0     0
                          M   0     0     0  NO. JOINT APPTS         0                                M     0     0
                          D   0     0     0                                                           D     0     0

DPR PROGRAM               A  13    13    13   53    0    5  120   85 FACULTY    1     3 GRAD      0 A   459   505
IN DEPT OF DPR            B   0     0     0                          OTHER      0     0 UNDGR  2538 B     0     0
                          M   0     0     0  NO. JOINT APPTS         3                                M     0     0
                          D   0     0     0                                                           D     0     0

DPR PROGRAM               A   1     1     1    2    0    0    4    3 FACULTY    0     0 GRAD      0 A     0    20
IN DEPT OF ISY            B   0     0     0                          OTHER      0     0 UNDGR   135 B     0     0
                          M   0     0     0  NO. JOINT APPTS         0                                M     0     0
                          D   0     0     0                                                           D     0     0

DPR PROGRAM               A   1     1     1   25    0    0    5   26 FACULTY    5     0 GRAD      0 A     0     0
IN DEPT OF MAT            B   0     0     0                          OTHER      0     0 UNDGR     0 B     0     0
                          M   0     0     0  NO. JOINT APPTS         0                                M     0     0
                          D   0     0     0                                                           D     0     0

DPR PROGRAM               A   1     1     1    4    0    0   33    9 FACULTY    0     0 GRAD      0 A    37    43
IN DEPT OF NEC            B   0     0     0                          OTHER      0     0 UNDGR   195 B     0     0
                          M   0     0     0  NO. JOINT APPTS         0                                M     0     0
                          D   0     0     0                                                           D     0     0

OTH PROGRAM               A   1     1     1   10    0    0    4   14 FACULTY    0     0 GRAD      0 A     0     0
IN DEPT OF EET            B   0     0     0                          OTHER      0     0 UNDGR     0 B     0     0
                          M   0     0     0  NO. JOINT APPTS         0                                M     0     0
                          D   0     0     0                                                           D     0     0
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                                          SUMMARY BY CEGREE PROGRAMS
      GROUP (PUBLIC :ASSOCIATE:20,000 PLUS  )
                                            (AS OF JUNE 30, 1977)

  PROGRAM NAME          CEGREE LEVEL AND   *******            S T A F F          ******* MAJORS              DEGREES
    AND DEPARTMENT        YEAR OFFERED     FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED            AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE       COMP-SC OTHR 1976 - 1977         76-77 77-78

 CPR PROGRAM           A    1     1     1      8    0   22    3   20 FACULTY     1     0  GRAD       0  A    40    50
 IN DEPT OF DPR        B    0     0     0                            OTHER       0     0  UNDGR    999  B     0     0
                       M    0     0     0  NO. JOINT APPTS           0                                  M     0     0
                       D    0     0     0                                                               D     0     0

 CST PRCGRAM           A    1     1     1      3    0    2    0    4 FACULTY     0     0  GRAD       0  A     7    15
 IN DEPT OF EET        B    0     0     0                            CTHER       0     0  UNDGR     85  B     0     0
                       M    0     0     0  NO. JOINT APPTS           0                                  M     0     0
                       D    0     0     0                                                               D     0     0

 CTE PROGRAM           A    1     1     1      1    0    1    1    1 FACULTY     0     0  GRAD       0  A     6     0
 IN DEPT OF CSC        B    0     0     0                            OTHER       0     0  UNDGR     40  B     0     0
                       M    0     0     0  NO. JOINT APPTS           0                                  M     0     0
                       D    0     0     0                                                               D     0     0

 DPR PROGRAM           A    2     2     2     10    0   13    0   16 FACULTY     0     0  GRAD       0  A   133   170
 IN DEPT OF BAD        B    0     0     0                            OTHER       0     0  UNDGR    824  B     0     0
                       M    0     0     0  NO. JOINT APPTS           0                                  M     0     0
                       D    0     0     0                                                               D     0     0

 DPR PRCGRAM           A    1     1     1      4    0   22   12   15 FACULTY     0     0  GRAD       0  A    25    35
 IN DEPT OF CSC        B    0     0     0                            OTHER       0     0  UNDGR    200  B     0     0
                       M    0     0     0  NO. JOINT APPTS           0                                  M     0     0
                       D    0     0     0                                                               D     0     0

 DPR PROGRAM           A    4     4     4     32    0    2   35   42 FACULTY     0     1  GRAD       0  A   217   228
 IN DEPT CF CPR        B    0     0     0                            CTHER       0     0  UNDGR    767  B     0     0
                       M    0     0     0  NO. JOINT APPTS           2                                  M     0     0
                       D    0     0     0                                                               D     0     0

 DPR PROGRAM           A    1     1     1      0    0    0    0    0 FACULTY     0     0  GRAD       0  A     0     0
 IN DEPT CF SYS        B    0     0     0                            OTHER       0     0  UNDGR      0  B     0     0
                       M    0     0     0  NO. JOINT APPTS           0                                  M     0     0
                       D    0     0     0                                                               D     0     0

 ICS PROGRAM           A    1     1     1      4    0    0    0    4 FACULTY     0     0  GRAD       0  A    16    20
 IN DEPT OF CIS        B    0     0     0                            CTHER       0     0  UNDGR     36  B     0     0
                       M    0     0     0  NO. JOINT APPTS           0                                  M     0     0
                       D    0     0     0                                                               D     0     0

 ISY PRCGRAM           A    1     1     1      6    0    0   15   12 FACULTY     0     0  GRAD       0  A    65    72
 IN DEPT OF ISY        B    0     0     0                            OTHER       0     0  UNDGR    358  B     0     0
                       M    0     0     0  NO. JOINT APPTS           3                                  M     0     0
                       D    0     0     0                                                               D     0     0

 OTH PROGRAM           A    1     1     1      1    0    3    0    2 FACULTY     0     1  GRAD       0  A     0     0
 IN DEPT OF MAT        B    0     0     0                            CTHER       0     0  UNDGR      0  B     0     0
                       M    0     0     0  NO. JOINT APPTS           0                                  M     0     0
                       D    0     0     0                                                               D     0     0
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                                                       SUMMARY BY DEGREE PROGRAMS
      GROUP (PUBLIC :BACHELORS:500-2499      )
                                                        (AS OF JUNE 30, 1977)

 PROGRAM NAME               CEGREE LEVEL AND   *******         S T A F F          ******* MAJORS            DEGREES
   AND DEPARTMENT            YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED           AWARDED
                           76-77 77-78 78-79 TIME RA-S TA-S OTHR FTE        COMP-SC CTHR 1976 - 1977       76-77 77-78

CPR PROGRAM               A   1     1     1     0    0    0    0    0 FACULTY    0     2  GRAD      0  A    2     2
IN DEPT OF BAD            B   0     0     0                           CTHER      0     0  UNDGR     4  B    0     0
                          M   0     0     0  NO. JOINT APPTS          5                                M    0     0
                          D   0     0     0                                                            D    0     0

CSC PROGRAM               A   1     1     1     2    0    0    0    2 FACULTY    0     0  GRAD      0  A    6    11
IN DEPT OF BAD            B   0     0     0                           OTHER      0     0  UNDGR    17  B    0     0
                          M   0     0     0  NO. JOINT APPTS          0                                M    0     0
                          D   0     0     0                                                            D    0     0

CSC PROGRAM               A   0     0     0     1    0    0    6    3 FACULTY    1     0  GRAD      0  A    0     0
IN DEPT OF CSC            B   1     1     1                           CTHER      0     0  UNDGR   149  B   24    26
                          M   0     0     0  NO. JCINT APPTS          0                                M    0     0
                          D   0     0     0                                                            D    0     0

CST PROGRAM               A   1     1     1     6    0    0    0    6 FACULTY    0     0  GRAD      0  A   23    26
IN DEPT OF COM            B   1     1     1                           OTHER      0     0  UNDGR    97  B   10    18
                          M   0     0     0  NO. JOINT APPTS          0                                M    0     0
                          D   0     0     0                                                            D    0     0

CST PROGRAM               A   1     1     1     2    0    0    0    2 FACULTY    0     0  GRAD      0  A   10    12
IN DEPT OF EET            B   0     0     0                           OTHER      0     0  UNDGR    25  B    0     0
                          M   0     0     0  NO. JOINT APPTS          0                                M    0     0
                          D   0     0     0                                                            D    0     0

DPR PROGRAM               A   1     1     1     1    0    1    0    1 FACULTY    0     0  GRAD      0  A   10     8
IN DEPT OF BAD            B   1     1     1                           CTHER      0     0  UNDGR    91  B   23    31
                          M   0     0     0  NC. JOINT APPTS          0                                M    0     0
                          D   0     0     0                                                            D    0     0

MSC PROGRAM               A   0     0     0    12    0    0    0   12 FACULTY    0     0  GRAD      0  A    0     0
IN DEPT OF CSC            B   1     1     1                           CTHER      2     0  UNDGR   100  B   21    19
                          M   0     0     0  NO. JOINT APPTS          0                                M    0     0
                          D   0     0     0                                                            D    0     0

OTH PROGRAM               A   1     1     1     1    0    0    0    1 FACULTY    0     0  GRAD      0  A    0     2
IN DEPT OF CSC            B   0     0     0                           OTHER      0     0  UNDGR     3  B    0     0
                          M   0     0     0  NC. JOINT APPTS          0                                M    0     0
                          D   0     0     0                                                            D    0     0

OTH PROGRAM               A   0     0     0     8    0    0    0    8 FACULTY    0     3  GRAD      0  A    0     0
IN DEPT OF MAT            B   1     1     1                           OTHER      0     0  UNDGR    20  B    2     8
                          M   0     0     0  NO. JOINT APPTS          0                                M    0     0
                          D   0     0     0                                                            D    0     0
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                                                   SUMMARY BY DEGREE PROGRAMS
       GROUP (PUBLIC :BACHELORS:2500-9999     )
                                                  (AS OF JUNE 30, 1977)

 PROGRAM NAME            DEGREE LEVEL AND     *******          S T A F F          *******  MAJORS            DEGREES
    AND DEPARTMENT         YEAR OFFERED       FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED          AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE         COMP-SC OTHR  1976 - 1977       76-77 77-78

CSC PROGRAM               A    1     1     1    1    0    0    1    2 FACULTY     1    0 GRAD      0 A    10    10
IN DEPT OF COM            B    1     1     1                          OTHER       0    0 UNDGR    40 B     3     3
                          M    0     0     0 NO. JOINT APPTS        0                                M     0     0
                          D    0     0     0                                                         D     0     0

CSC PROGRAM               A    1     1     1    5    0    0   10    8 FACULTY     2    3 GRAD      0 A    24    28
IN DEPT OF CSC            B    1     2     2                          OTHER       0    0 UNDGR   185 B    10    18
                          M    0     0     0 NO. JOINT APPTS        3                                M     0     0
                          D    0     0     0                                                         D     0     0

CSC PROGRAM               A    0     0     0    1    0    0    4    2 FACULTY     0    4 GRAD      0 A     0     0
IN DEPT OF MAT            B    1     1     1                          OTHER       0    0 UNDGR    11 B     3     5
                          M    0     0     0 NO. JOINT APPTS        3                                M     0     0
                          D    0     0     0                                                         D     0     0

DPR PROGRAM               A    0     0     0    1    0    0    0    1 FACULTY     0    0 GRAD      0 A     0     0
IN DEPT OF BAD            B    1     1     1                          OTHER       0    0 UNDGR    27 B     5     6
                          M    0     0     0 NO. JOINT APPTS        0                                M     0     0
                          D    0     0     0                                                         D     0     0

DPR PROGRAM               A    3     3     3    7    0    4    9   11 FACULTY     0    1 GRAD      0 A     9    24
IN DEPT OF DPR            B    1     1     1                          OTHER       0    0 UNDGR   142 B    14    20
                          M    0     0     0 NO. JOINT APPTS        6                                M     0     0
                          D    0     0     0                                                         D     0     0

DPR PROGRAM               A    1     1     1    4    0    0    0    4 FACULTY     0    0 GRAD      0 A    12    10
IN DEPT OF NEC            B    0     0     0                          OTHER       1    0 UNDGR    55 B     0     0
                          M    0     0     0 NO. JOINT APPTS        0                                M     0     0
                          D    0     0     0                                                         D     0     0

ISC PROGRAM               A    0     0     0    8    8    0    0   10 FACULTY     0    0 GRAD      0 A     0     0
IN DEPT OF BAD            B    1     1     1                          OTHER       0    0 UNDGR    75 B    33    40
                          M    0     0     0 NO. JOINT APPTS        0                                M     0     0
                          D    0     0     0                                                         D     0     0

ISC PROGRAM               A    0     0     0    3    0    0    0    3 FACULTY     1    0 GRAD      0 A     0     0
IN DEPT OF CSC            B    1     1     1                          OTHER       0    0 UNDGR     0 B     0     0
                          M    0     0     0 NO. JOINT APPTS        0                                M     0     0
                          D    0     0     0                                                         D     0     0

OTH PROGRAM               A    0     0     0    1    0    0    1    2 FACULTY     0    0 GRAD      0 A     6    15
IN DEPT OF BAD            B    1     1     1                          OTHER       0    0 UNDGR    93 B     8    13
                          M    0     0     0 NO. JOINT APPTS        0                                M     0     0
                          D    0     0     0                                                         D     0     0

OTH PROGRAM               A    1     1     0    8    0    0    0    8 FACULTY     0    0 GRAD      0 A    31    40
IN DEPT OF CIS            B    0     0     1                          OTHER       0    0 UNDGR   320 B     0     0
                          M    0     0     0 NO. JOINT APPTS        0                                M     0     0
                          D    0     0     0                                                         D     0     0
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                                                   SUMMARY BY CEGREE PROGRAMS
      GROUP (PUBLIC :MASTERS  :500-2499     )
                                                   (AS OF JUNE 30, 1977)

 PROGRAM NAME            CEGREE LEVEL AND   *******            S T A F F F           ******* MAJORS             DEGREES
    AND DEPARTMENT        YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED           AWARDED
                         76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE        COMP-SC OTHR 1976 - 1977        76-77 77-78

CEN PROGRAM              A   1     1     1     0    0    0    4    1 FACULTY    0     1  GRAD       0  A    8     8
IN DEPT CF BAD           B   0     0     0                           CTHER      0     0  UNDGR     14  B    0     0
                         M   0     0     0 NO. JOINT APPTS         4                                   M    0     0
                         D   0     0     0                                                             D    0     0

CEN PROGRAM              A   0     0     0     3    1    2    2    4 FACULTY    2     1  GRAD      20  A    0     0
IN DEPT CF EEN           B   0     0     0                           OTHER      0     0  UNDGR      0  B    0     0
                         M   1     1     1 NO. JOINT APPTS         0                                   M   12    12
                         D   0     0     0                                                             D    0     0

CSC PROGRAM              A   0     0     0     2    0    0    0    2 FACULTY    0     0  GRAD       0  A    0     0
IN DEPT OF BUS           B   0     1     1                           OTHER      0     0  UNDGR      2  B    0     2
                         M   0     0     0 NO. JOINT APPTS         0                                   M    0     0
                         D   0     0     0                                                             D    0     0

CSC PRCGRAM              A   1     1     1     4    0    0    7    6 FACULTY    2     0  GRAD       0  A    5     6
IN DEPT OF CSC           B   2     2     2                           OTHER      0     0  UNDGR    141  B   10    14
                         M   0     0     1 NO. JOINT APPTS         1                                   M    0     0
                         D   0     0     0                                                             D    0     0

CSC PROGRAM              A   1     1     1     2    0    0    0    1 FACULTY    1     0  GRAD       0  A    5     5
IN DEPT OF MSC           B   0     0     0                           CTHER      0     0  UNDGR     10  B    0     0
                         M   0     0     0 NO. JOINT APPTS         1                                   M    0     0
                         D   0     0     0                                                             D    0     0

DPR PROGRAM              A   0     0     0     1    0    0    1    1 FACULTY    1     0  GRAD       0  A    0     0
IN DEPT OF CSC           B   1     1     1                           OTHER      0     0  UNDGR     70  B   25    30
                         M   0     0     0 NO. JOINT APPTS         0                                   M    0     0
                         D   0     0     0                                                             D    0     0

DPR PROGRAM              A   0     1     1     1    0    0    3    2 FACULTY    0     0  GRAD       0  A    0     2
IN DEPT OF NEC           B   0     0     0                           OTHER      0     0  UNDGR      2  B    0     0
                         M   0     0     0 NO. JOINT APPTS         3                                   M    0     0
                         D   0     0     0                                                             D    0     0

ISC PROGRAM              A   0     0     0     3    0    1    0    3 FACULTY    0     1  GRAD       0  A    0     0
IN DEPT OF CSC           B   1     1     1                           OTHER      0     0  UNDGR     55  B    9     7
                         M   0     0     0 NO. JCINT APPTS         0                                   M    0     0
                         D   0     0     0                                                             D    0     0

SAN PROGRAM              A   1     1     1     2    0    0    0    2 FACULTY    0     0  GRAD       0  A    5     5
IN DEPT OF BAD           B   0     0     0                           CTHER      0     0  UNDGR     20  B    0     0
                         M   0     0     0 NO. JOINT APPTS         0                                   M    0     0
                         D   0     0     0                                                             D    0     0
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                                          SUMMARY BY DEGREE PROGRAMS

       GROUP (PUBLIC :MASTERS  12500-9999    )
                                            (AS OF JUNE 30, 1977)

  PROGRAM NAME          DEGREE LEVEL AND   *******        S T A F F           *******  MAJORS          DEGREES
    AND DEPARTMENT        YEAR OFFERED     FULL **PART  TIME** TOT *** DOCTORATES ***  ENROLLED        AWARDED
                        76-77 77-78 78-79 TIME MA-S TA-S OTHR  FTE     COMP-SC OTHR  1976 - 1977     76-77 77-78

CIS PROGRAM         A   1     1     1     1    0    2    0    1 FACULTY     0     0  GRAD     0  A    0     0
IN DEPT OF CIS      B   1     1     1                           OTHER       0     0  UNDGR    0  B    0     0
                    M   0     0     0  NO. JOINT APPTS        0                                  M    0     0
                    D   0     0     0                                                            D    0     0

CPR PROGRAM         A   1     1     1     0    0    0    5    2 FACULTY     1     1  GRAD     0  A   12    20
IN DEPT OF CIS      B   0     0     0                           OTHER       0     0  UNDGR   82  B    0     0
                    M   0     0     0  NO. JOINT APPTS        0                                  M    0     0
                    D   0     0     0                                                            D    0     0

CPR PROGRAM         A   1     1     1     6    0    1   18   10 FACULTY     0     1  GRAD     0  A    0     0
IN DEPT OF ISY      B   1     1     1                           OTHER       0     0  UNDGR  205  B   12    11
                    M   0     0     0  NO. JOINT APPTS        0                                  M    0     0
                    D   0     0     0                                                            D    0     0

CSC PROGRAM         A   0     0     0     1    0    3    5    3 FACULTY     1     1  GRAD     0  A    8     0
IN DEPT OF CIS      B   2     2     2                           OTHER       0     0  UNDGR  195  B   19    23
                    M   0     0     0  NO. JOINT APPTS        0                                  M    0     0
                    D   0     0     0                                                            D    0     0

CSC PROGRAM         A   0     0     0    10    0    1    0   10 FACULTY     0     1  GRAD   124  A    0     0
IN DEPT OF COM      B   1     1     1                           OTHER       0     9  UNDGR   75  B   11    15
                    M   1     1     1  NO. JOINT APPTS        3                                  M    3    10
                    D   0     0     0                                                            D    0     0

CSC PROGRAM         A   4     4     4    56    5    0   30   72 FACULTY    32    16  GRAD    50  A   44    59
IN DEPT OF CSC      B  12    12    14                           OTHER       1    11  UNDGR 1677  B  198   244
                    M   1     1     1  NO. JOINT APPTS       15                                  M    1     3
                    D   0     0     0                                                            D    0     0

CSC PROGRAM         A   0     0     0     4    0    0    0    4 FACULTY     1     2  GRAD     0  A    0     0
IN DEPT OF ICS      B   1     1     1                           OTHER       0     0  UNDGR   33  B    5     7
                    M   0     0     0  NO. JOINT APPTS        0                                  M    0     0
                    D   0     0     0                                                            D    0     0

CSC PROGRAM         A   3     3     3    19    1    0   16   25 FACULTY     6    13  GRAD     0  A    1    21
IN DEPT OF MAT      B   8     8     8                           OTHER       1     2  UNDGR  351  B   48    58
                    M   0     0     0  NO. JOINT APPTS        5                                  M    0     0
                    D   0     0     0                                                            D    0     0

CSC PROGRAM         A   0     0     0     5    0    0    1    5 FACULTY     2     3  GRAD     0  A    0     0
IN DEPT OF MCS      B   1     1     1                           OTHER       0     0  UNDGR  100  B   20    20
                    M   0     0     0  NO. JOINT APPTS        0                                  M    0     0
                    D   0     0     0                                                            D    0     0

CSC PROGRAM         A   0     0     0    13    0    2    6   15 FACULTY     4    10  GRAD     0  A    0     0
IN DEPT OF MSC      B   3     3     3                           OTHER       0     1  UNDGR  443  B   24    29
                    M   0     1     1  NO. JOINT APPTS        2                                  M    0     0
                    D   0     0     0                                                            D    0     0

CST PROGRAM         A   1     1     1     1    0    0    7    3 FACULTY     0     3  GRAD     0  A    0    16
IN DEPT OF MAT      B   0     0     0                           OTHER       0     0  UNDGR   24  B    0     0
                    M   0     0     0  NO. JOINT APPTS        2                                  M    0     0
                    D   0     0     0                                                            D    0     0

CTE PROGRAM         A   1     1     1     6    0    3   10   15 FACULTY     0     2  GRAD     0  A   39    37
IN DEPT OF CTE      B   1     1     1                           OTHER       0     2  UNDGR  620  B    9     7
                    M   0     0     0  NO. JOINT APPTS        0                                  M    0     0
                    D   0     0     0                                                            D    0     0

DPR PROGRAM         A   3     3     3    19    0    4   19   26 FACULTY     2     6  GRAD     0  A   22    34
IN DEPT OF BAD      B   6     6     6                           OTHER       0     3  UNDGR  638  B   70    82
                    M   0     0     0  NO. JOINT APPTS        2                                  M    0     0
                    D   0     0     0                                                            D    0     0

DPR PROGRAM         A   1     1     1     4    0    0    7    6 FACULTY     0     4  GRAD     7  A    1     5
IN DEPT OF BUS      B   2     2     2                           OTHER       0     4  UNDGR  139  B   11    25
                    M   1     1     1  NO. JOINT APPTS        3                                  M    0     1
                    D   0     0     0                                                            D    0     0

DPR PROGRAM         A   1     1     1     1    0    0    0    1 FACULTY     0     0  GRAD     0  A    2    11
IN DEPT OF COM      B   0     0     0                           OTHER       0     0  UNDGR   51  B    0     0
                    M   0     0     0  NO. JOINT APPTS        0                                  M    0     0
                    D   0     0     0                                                            D    0     0

DPR PROGRAM         A   1     1     1    14    0    0    7   17 FACULTY     0     1  GRAD     0  A    9    12
IN DEPT OF CPR      B   2     2     2                           OTHER       0     0  UNDGR  440  B   59    76
                    M   0     0     0  NO. JOINT APPTS        0                                  M    0     0
                    D   0     0     0                                                            D    0     0

DPR PROGRAM         A   1     1     1     0    0    0    5    3 FACULTY     0     0  GRAD     0  A   12    15
IN DEPT OF NEC      B   0     0     0                           OTHER       0     0  UNDGR  149  B    0     0
                    M   0     0     0  NO. JOINT APPTS        5                                  M    0     0
                    D   0     0     0                                                            D    0     0
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                                          SUMMARY BY DEGREE PROGRAMS
        GROUP (PUBLIC ;MASTERS ;2500-9999    ) CONTINUED
                                            (AS OF JUNE 30, 1977)

   PROGRAM NAME            DEGREE LEVEL AND   *******        S T A F F          *******  MAJORS            DEGREES
      AND DEPARTMENT         YEAR OFFERED     FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED          AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE       COMP-SC OTHR  1976 - 1977       76-77 77-78

IPR PROGRAM                A    0     0     0    3    0    0    1    5 FACULTY    0     0  GRAD        0  A    0     0
IN DEPT OF CIS             B    1     1     1                         OTHER      0     1  UNDGR      90  B    5    15
                           M    0     0     0 NO. JOINT APPTS     0                                       M    0     0
                           D    0     0     0                                                             D    0     0

ISC PROGRAM                A    0     0     0    3    0    0    1    3 FACULTY    2     1  GRAD        0  A    0     0
IN DEPT OF ISY             B    1     1     1                         OTHER      0     0  UNDGR      39  B    9     9
                           M    0     0     0 NO. JOINT APPTS     1                                       M    0     0
                           D    0     0     0                                                             D    0     0

ISY PROGRAM                A    0     0     0    5    0    0    0    5 FACULTY    0     5  GRAD        0  A    0     0
IN DEPT OF BAD             B    1     1     1                         OTHER      0     0  UNDGR      25  B    5    20
                           M    0     0     0 NO. JOINT APPTS     0                                       M    0     0
                           D    0     0     0                                                             D    0     0

ISY PROGRAM                A    0     0     0    3    0    2    2    5 FACULTY    1     0  GRAD        0  A    0     0
IN DEPT OF BUS             B    1     1     1                         OTHER      0     0  UNDGR      13  B    0     4
                           M    0     0     0 NO. JOINT APPTS     0                                       M    0     0
                           D    0     0     0                                                             D    0     0

ISY PROGRAM                A    1     1     1    4    0    0    0    4 FACULTY    1     2  GRAD        0  A    1     0
IN DEPT OF ICS             B    1     1     1                         OTHER      0     0  UNDGR      66  B   15    21
                           M    0     0     0 NO. JOINT APPTS     0                                       M    0     0
                           D    0     0     0                                                             D    0     0

ISY PROGRAM                A    1     1     1    7    0    0    4    9 FACULTY    3     4  GRAD        0  A    0     5
IN DEPT OF ISY             B    2     2     2                         OTHER      0     0  UNDGR     190  B   27    40
                           M    0     0     0 NO. JOINT APPTS     0                                       M    0     0
                           D    0     0     0                                                             D    0     0

ISY PROGRAM                A    0     0     0    7    0    0    0    7 FACULTY    0     5  GRAD        0  A    0     0
IN DEPT OF NEC             B    1     1     1                         OTHER      0     0  UNDGR     160  B   35    40
                           M    0     0     0 NO. JOINT APPTS     0                                       M    0     0
                           D    0     0     0                                                             D    0     0

OTH PROGRAM                A    0     0     0    2    0    1    0    2 FACULTY    1     1  GRAD        0  A    0     0
IN DEPT OF BAD             B    1     1     1                         OTHER      0     2  UNDGR       8  B    0     1
                           M    0     0     0 NO. JOINT APPTS     2                                       M    0     0
                           D    0     0     0                                                             D    0     0

OTH PROGRAM                A    0     0     0    4    0    0    1    5 FACULTY    0     4  GRAD        0  A    0     0
IN DEPT OF CIS             B    1     1     1                         OTHER      0     0  UNDGR       0  B    0     0
                           M    0     0     0 NO. JOINT APPTS     2                                       M    0     0
                           D    0     0     0                                                             D    0     0

OTH PROGRAM                A    0     0     0    8    0    0    2    9 FACULTY    0     3  GRAD        0  A    0     0
IN DEPT OF COM             B    2     2     2                         OTHER      0     0  UNDGR      80  B    5    20
                           M    0     0     0 NO. JOINT APPTS     4                                       M    0     0
                           D    0     0     0                                                             D    0     0

OTH PROGRAM                A    0     0     0    2    0    0    3    3 FACULTY    0     2  GRAD        0  A    0     0
IN DEPT OF ISY             B    1     1     1                         OTHER      0     0  UNDGR      65  B    0     0
                           M    0     0     0 NO. JOINT APPTS     1                                       M    0     0
                           D    0     0     0                                                             D    0     0

OTH PROGRAM                A    0     0     0    5    2    0    2    6 FACULTY    1     3  GRAD        0  A    0     0
IN DEPT OF MAT             B    2     2     2                         OTHER      0     0  UNDGR      63  B   11    15
                           M    0     0     0 NO. JOINT APPTS     2                                       M    0     0
                           D    0     0     0                                                             D    0     0

OTH PROGRAM                A    0     0     0    2    0    0    4    4 FACULTY    1     4  GRAD        0  A    0     0
IN DEPT OF NEC             B    1     1     1                         OTHER      0     0  UNDGR     105  B   32    30
                           M    0     0     0 NO. JOINT APPTS     0                                       M    0     0
                           D    0     0     0                                                             D    0     0

SYS PROGRAM                A    0     0     0    5    0    0    6    8 FACULTY    0     3  GRAD        4  A    0     0
IN DEPT OF SYS             B    1     1     1                         OTHER      0     0  UNDGR     180  B   70    75
                           M    1     1     1 NO. JOINT APPTS     1                                       M    0     1
                           D    0     0     0                                                             D    0     0
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                                              SUMMARY BY DEGREE PROGRAMS

        GROUP (PUBLIC (MASTERS  (10,000-19,999)
                                                (AS OF JUNE 30, 1977)

 PROGRAM NAME              DEGREE LEVEL AND   *******          S T A F F          *******  MAJORS            DEGREES
    AND DEPARTMENT          YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED          AWARDED
                           76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE        COMP-SC CTHR  1976 - 1977       76-77 77-78

CEN PROGRAM                A   0     0     0    3    0    2    0    4 FACULTY    1     2 GRAD     20 A    0     0
IN DEPT OF EEN             B   1     1     1                          CTHER      0     0 UNDGR    10 B   12    15
                           M   1     1     1 NO. JOINT APPTS        0                                M    3     5
                           D   0     0     0                                                         D    0     0

CIS PROGRAM                A   0     0     0    6    0    0    0    6 FACULTY    1     0 GRAD      0 A    0     0
IN DEPT OF BUS             B   1     1     1                          OTHER      0     2 UNDGR    25 B    0     0
                           M   0     0     0 NO. JOINT APPTS        0                                M    0     0
                           D   0     0     0                                                         D    0     0

CSC PROGRAM                A   0     0     0    2    0    4    2    3 FACULTY    0     1 GRAD      0 A    0     0
IN DEPT OF CIS             B   0     1     1                          CTHER      0     0 UNDGR     0 B    0     0
                           M   0     0     0 NO. JOINT APPTS        0                                M    0     0
                           D   0     0     0                                                         D    0     0

CSC PROGRAM                A   0     0     0    5    0    0   17    8 FACULTY    0     7 GRAD      0 A    0     0
IN DEPT OF COM             B   1     1     1                          CTHER      0     2 UNDGR   275 B   60    75
                           M   0     0     0 NO. JOINT APPTS        4                                M    0     0
                           D   0     0     0                                                         D    0     0

CSC PROGRAM                A   0     0     0   46   10   31   22   52 FACULTY    9    30 GRAD    161 A    0     0
IN DEPT OF CSC             B   6     6     6                          CTHER      0     2 UNDGR   982 B  195   255
                           M   3     3     3 NO. JOINT APPTS       17                                M   19    26
                           D   0     0     0                                                         D    0     0

CSC PROGRAM                A   0     0     0    8    1    2    9   14 FACULTY    1     6 GRAD      0 A    0     0
IN DEPT CF MAT             B   2     3     3                          OTHER      0     0 UNDGR   162 B   13    24
                           M   0     0     0 NC. JOINT APPTS        1                                M    0     0
                           D   0     0     0                                                         D    0     0

CSC PROGRAM                A   0     0     0   16    0    0   18  187 FACULTY    5     9 GRAD      0 A    0     0
IN DEPT OF MSC             B   5     5     5                          CTHER      0     0 UNDGR   518 B   92   113
                           M   0     0     0 NO. JOINT APPTS        6                                M    0     0
                           D   0     0     0                                                         D    0     0

CSC PROGRAM                A   0     0     0   22    0    6    2   24 FACULTY    8    12 GRAD     35 A    0     0
IN DEPT OF SCS             B   1     1     1                          OTHER      0     0 UNDGR   305 B   50    55
                           M   1     1     1 NC. JOINT APPTS        0                                M   12    16
                           D   0     0     0                                                         D    0     0

DPR PROGRAM                A   1     1     1    3    1    2    0    4 FACULTY    1     1 GRAD      0 A    6    12
IN DEPT OF BAD             B   1     1     1                          CTHER      0     0 UNDGR   121 B   21    32
                           M   0     0     0 NO. JOINT APPTS        0                                M    0     0
                           D   0     0     0                                                         D    0     0

DPR PROGRAM                A   0     0     0    6    0    0    6    7 FACULTY    0     0 GRAD      0 A    0     0
IN DEPT OF BUS             B   1     1     1                          CTHER      0     0 UNDGR   104 B   14    14
                           M   0     0     0 NC. JOINT APPTS        0                                M    0     0
                           D   0     0     0                                                         D    0     0

DPR PROGRAM                A   0     0     0   11    0    0    0    0 FACULTY    0     0 GRAD      0 A    0     0
IN DEPT OF DPR             B   1     1     1                          CTHER      0     8 UNDGR   291 B   53    70
                           M   0     0     0 NO. JOINT APPTS        0                                M    0     0
                           D   0     0     0                                                         D    0     0

DPR PROGRAM                A   1     1     1    2    0    0    4    3 FACULTY    0     0 GRAD      0 A   10    12
IN DEPT OF NEC             B   0     0     0                          OTHER      0     0 UNDGR    55 B    0     0
                           M   0     0     0 NO. JOINT APPTS        4                                M    0     0
                           D   0     0     0                                                         D    0     0

ICS PROGRAM                A   0     0     0    5    0    0    6    7 FACULTY    0     4 GRAD      0 A    0     0
IN DEPT OF ICS             B   1     1     1                          CTHER      0     0 UNDGR   182 B   35    36
                           M   0     0     0 NO. JOINT APPTS        0                                M    0     0
                           D   0     0     0                                                         D    0     0

ISC PROGRAM                A   0     0     0    2    0    0    1    3 FACULTY    1     2 GRAD      0 A    0     0
IN DEPT OF BAD             B   1     1     1                          CTHER      0     0 UNDGR    64 B    7     7
                           M   0     0     0 NC. JCINT APPTS        1                                M    0     0
                           D   0     0     0                                                         D    0     0

ISY PROGRAM                A   0     0     0    3    0    0    2    4 FACULTY    0     0 GRAD      0 A    0     0
IN DEPT CF ISY             B   1     1     1                          CTHER      0     3 UNDGR   120 B   13    26
                           M   0     0     0 NC. JCINT APPTS        1                                M    0     0
                           D   0     0     0                                                         D    0     0

SCS PROGRAM                A   0     0     0    9    0    2    4   14 FACULTY    1     5 GRAD      0 A    0     0
IN DEPT OF SCS             B   1     1     1                          CTHER      0     0 UNDGR   129 B   43    50
                           M   0     0     1 NO. JOINT APPTS        2                                M    0     0
                           D   0     0     0                                                         D    0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
               CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                    UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                  PAGE IX-22

                                                   SUMMARY BY DEGREE PROGRAMS
      GROUP (PUBLIC :MASTERS  120,000 PLUS  )
                                                    (AS OF JUNE 30, 1977)

  PROGRAM NAME            DEGREE LEVEL AND    *******           S T A F F         *******  MAJORS          DEGREES
    AND DEPARTMENT          YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED        AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE       COMP-SC OTHR  1976 - 1977     76-77 77-78

CSC PROGRAM               A    0     0     0   11    0    0   15  121 FACULTY    6    7  GRAD    139  A     0     0
IN DEPT OF CSC            B    2     2     2                          OTHER      2    4  UNDGR   713  B   124   136
                          M    2     2     2 NO. JOINT APPTS       0                                    M    32    33
                          D    1     1     1                                                            D     0     1

CSE PROGRAM               A    0     0     0   20    0    0   14   27 FACULTY    0    0  GRAD     30  A     0     0
IN DEPT OF EEN            B    1     1     1                          OTHER      0    0  UNDGR    90  B    22    40
                          M    1     1     1 NO. JOINT APPTS       0                                    M     9    20
                          D    0     0     0                                                            D     0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
               CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                    UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                   SUMMARY BY DEGREE PROGRAMS
      GROUP (PUBLIC :DOCTORATE:500-2499     )
                                                    (AS OF JUNE 30, 1977)

  PROGRAM NAME            DEGREE LEVEL AND    *******           S T A F F         *******  MAJORS          DEGREES
    AND DEPARTMENT          YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED        AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE       COMP-SC OTHR  1976 - 1977     76-77 77-78

CSC PROGRAM               A    0     0     0    5    0    5    1    6 FACULTY    3    0  GRAD      8  A     0     0
IN DEPT OF CSC            B    1     1     1                          OTHER      0    0  UNDGR    50  B     8     8
                          M    1     1     1 NO. JOINT APPTS       0                                    M     3     7
                          D    0     0     0                                                            D     0     0

OTH PROGRAM               A    0     0     0    1    0    0    3    2 FACULTY    1    7  GRAD      0  A     0     0
IN DEPT OF NEC            B    0     0     0                          OTHER      0    7  UNDGR     0  B     0     0
                          M    1     1     1 NO. JOINT APPTS       5                                    M     0     0
                          D    1     1     1                                                            D     0     0
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SUMMARY BY DEGREE PROGRAMS

GROUP (PUBLIC :DOCTORATE:2500-9999)

(AS OF JUNE 30, 1977)

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PROGRAM NAME         DEGREE LEVEL AND  *******            S T A F F       ******* MAJORS         DEGREES
  AND DEPARTMENT      YEAR OFFERED     FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED       AWARDED
                     76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE       COMP-SC OTHR 1976 - 1977    76-77 77-78

CEN PROGRAM          A   0    0    0     0    0    1    7     3 FACULTY     0    4 GRAD      0 A     0     0
IN DEPT OF EEN       B   1    1    1                            OTHER       0    0 UNDGR     6 B     2     4
                     M   0    0    0  NO. JOINT APPTS         0                                M     0     0
                     D   0    0    0                                                           D     0     0

CPR PROGRAM          A   0    0    0     6    5    3    0     7 FACULTY     3    3 GRAD      0 A     0     0
IN DEPT OF SCS       B   1    1    1                            OTHER       0    0 UNDGR    60 B    14     8
                     M   0    0    1  NO. JOINT APPTS         4                                M     0     0
                     D   0    0    0                                                           D     0     0

CSC PROGRAM          A   0    0    0     3    0    0    2     3 FACULTY     3    0 GRAD      0 A     0     0
IN DEPT OF COM       B   1    1    1                            OTHER       0    0 UNDGR    67 B    12    12
                     M   0    0    0  NO. JOINT APPTS         0                                M     0     0
                     D   0    0    0                                                           D     0     0

CSC PROGRAM          A   0    0    0    33    4   21   42    57 FACULTY    11   15 GRAD    131 A     0     0
IN DEPT OF CSC       B   8    8    8                            OTHER       0    1 UNDGR   578 B   122   146
                     M   2    3    4  NO. JOINT APPTS         8                                M    31    35
                     D   1    1    1                                                           D     2     1

CSC PROGRAM          A   0    0    0     3    0    0    5     6 FACULTY     0    2 GRAD      0 A     0     0
IN DEPT OF ICS       B   1    1    1                            OTHER       0    0 UNDGR   232 B     1    10
                     M   0    0    0  NO. JOINT APPTS         1                                M     0     0
                     D   0    0    0                                                           D     0     0

CSC PROGRAM          A   0    0    0     5    0    2    3     8 FACULTY     2    2 GRAD      4 A     0     0
IN DEPT OF MAT       B   1    1    1                            OTHER       0    0 UNDGR    53 B     9     8
                     M   1    1    1  NO. JOINT APPTS         0                                M     1     3
                     D   0    0    0                                                           D     0     0

CSC PROGRAM          A   0    0    0     6    3    7    0    11 FACULTY     6    0 GRAD     85 A     0     0
IN DEPT OF MSC       B   1    1    1                            OTHER       0    0 UNDGR    40 B    10    21
                     M   1    1    1  NO. JOINT APPTS         0                                M    12    14
                     D   1    1    1                                                           D     0     2

CSC PROGRAM          A   0    0    0     3    0    0    3     4 FACULTY     3    0 GRAD      0 A     0     0
IN DEPT. OF NEC      B   0    1    1                            OTHER       0    0 UNDGR    60 B     8    30
                     M   0    0    0  NO. JOINT APPTS         0                                M     0     0
                     D   0    0    0                                                           D     0     0

CSE PROGRAM          A   0    0    0     0   12    0   10     4 FACULTY     7    3 GRAD     50 A     0     0
IN DEPT OF COM       B   0    0    0                            OTHER       0    0 UNDGR     0 B     0     0
                     M   1    1    1  NO. JOINT APPTS         7                                M    12    15
                     D   0    0    0                                                           D     0     0

CTE PROGRAM          A   1    1    1     2    0    0    0     2 FACULTY     0    0 GRAD      0 A     1     1
IN DEPT OF BAD       B   0    0    0                            OTHER       0    0 UNDGR     5 B     0     0
                     M   0    0    0  NO. JOINT APPTS         0                                M     0     0
                     D   0    0    0                                                           D     0     0

DPR PROGRAM          A   0    0    0     2    0    0    2     2 FACULTY     2    0 GRAD      0 A     0     0
IN DEPT OF BAD       B   1    1    1                            OTHER       0    0 UNDGR   256 B     5    30
                     M   0    0    0  NO. JOINT APPTS         2                                M     0     0
                     D   0    0    0                                                           D     0     0

ICS PROGRAM          A   0    0    0     2    0    0    0     2 FACULTY     1    1 GRAD      0 A     0     0
IN DEPT OF BAD       B   1    1    1                            OTHER       0    0 UNDGR    15 B     8     9
                     M   0    0    0  NO. JOINT APPTS         0                                M     0     0
                     D   0    0    0                                                           D     0     0

ICS PROGRAM          A   0    0    0    19    7    2   12    27 FACULTY     2    8 GRAD    147 A     0     0
IN DEPT OF ICS       B   1    1    1                            OTHER       1    1 UNDGR   250 B    41    60
                     M   1    1    1  NO. JOINT APPTS         1                                M    67    56
                     D   1    1    1                                                           D     1     2

ISC PROGRAM          A   0    0    0     6    0    0    6     8 FACULTY     2    7 GRAD      3 A     0     0
IN DEPT OF ISC       B   0    0    0                            OTHER       0    0 UNDGR     0 B     0     0
                     M   1    1    1  NO. JOINT APPTS         6                                M     0     2
                     D   1    1    1                                                           D     3     2

SIS PROGRAM          A   0    0    0     2    0    0    0     2 FACULTY     1    3 GRAD      0 A     0     0
IN DEPT OF IEN       B   1    1    1                            OTHER       0    0 UNDGR   108 B    23    35
                     M   0    0    0  NO. JOINT APPTS         0                                M     0     0
                     D   0    0    0                                                           D     0     0
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                                           SUMMARY BY DEGREE PROGRAMS
        GROUP (PUBLIC ;DOCTORATE:10,000-19,999)
                                             (AS OF JUNE 30, 1977)

 PROGRAM NAME          DEGREE LEVEL AND   *******          S T A F F         ******* MAJORS              DEGREES
   AND DEPARTMENT       YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED           AWARDED
                       76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE        COMP-SC OTHR 1976 - 1977      76-77 77-78

CEA PROGRAM            A   0     0     0    0    0    0    0    0 FACULTY   0    0  GRAD      0  A     0     0
IN DEPT OF EEN         B   1     1     1                            OTHER     0    0  UNDGR     0  B     0     0
                       M   1     1     1 NO. JOINT APPTS          0                                 M     0     0
                       D   1     1     1                                                            D     0     0

CSC PROGRAM            A   0     0     0   17    5    1   14   23 FACULTY   3   17  GRAD     89  A     0     0
IN DEPT OF CIS         B   2     2     2                            OTHER     0    0  UNDGR   230  B    22    41
                       M   2     2     2 NO. JOINT APPTS          3                                 M    10    15
                       D   1     1     1                                                            D     0     1

CSC PROGRAM            A   0     0     0    8    2   12   17   18 FACULTY   7   12  GRAD     13  A     0     0
IN DEPT OF COM         B   2     2     2                            OTHER     0    0  UNDGR   100  B    21    40
                       M   1     1     2 NO. JOINT APPTS         16                                 M     0     3
                       D   0     0     0                                                            D     0     0

CSC PROGRAM            A   0     0     0  104   29   71   38  156 FACULTY  45   46  GRAD    326  A     0     0
IN DEPT OF CSC         B  13    14    14                            OTHER     4    3  UNDGR  1958  B   348   435
                       M   8     9    10 NO. JOINT APPTS         44                                 M   115   121
                       D   2     2     2                                                            D     4     5

CSC PROGRAM            A   0     0     0    4    0    0    2    5 FACULTY   0    4  GRAD      0  A     0     0
IN DEPT OF ENG         B   1     1     1                            OTHER     0    1  UNDGR   175  B     8    20
                       M   0     0     0 NO. JOINT APPTS          1                                 M     0     0
                       D   0     0     0                                                            D     0     0

CSC PROGRAM            A   0     0     0    0    0    0    2    1 FACULTY   1    1  GRAD      0  A     0     0
IN DEPT OF IEN         B   1     1     1                            OTHER     1    0  UNDGR    10  B     0     0
                       M   0     0     0 NO. JOINT APPTS          2                                 M     0     0
                       D   0     0     0                                                            D     0     0

CSC PROGRAM            A   0     0     0    2    0    2    0    3 FACULTY   0    0  GRAD      2  A     0     0
IN DEPT OF MAT         B   0     0     0                            OTHER     0    0  UNDGR     0  B     0     0
                       M   0     1     1 NO. JOINT APPTS          0                                 M     0     0
                       D   0     0     0                                                            D     0     0

CSC PROGRAM            A   0     0     0    9    0    1    2    7 FACULTY   2    7  GRAD     25  A     0     0
IN DEPT OF PSC         B   2     2     2                            OTHER     1    1  UNDGR    35  B     4     9
                       M   2     2     2 NO. JOINT APPTS          2                                 M     7     8
                       D   0     0     0                                                            D     0     0

CSC PROGRAM            A   0     0     0   39    2   11    1   46 FACULTY  17   20  GRAD     41  A     0     0
IN DEPT OF NEC         B   1     1     1                            OTHER     0    0  UNDGR   200  B    40    50
                       M   2     2     2 NO. JOINT APPTS         29                                 M     4     5
                       D   2     2     2                                                            D     2     2

CSC PROGRAM            A   0     0     0    9    0    2   11   10 FACULTY   0    0  GRAD     19  A     0     0
IN DEPT OF SCS         B   1     1     1                            OTHER     0    0  UNDGR    18  B    10    10
                       M   1     1     1 NO. JOINT APPTS          0                                 M     5     5
                       D   0     0     0                                                            D     0     0

CSE PROGRAM            A   0     0     0    7    1    6    0   11 FACULTY   7    0  GRAD    110  A     0     0
IN DEPT OF CSE         B   0     0     0                            OTHER     0    0  UNDGR     0  B     0     0
                       M   1     1     1 NO. JOINT APPTS          0                                 M    14    15
                       D   0     0     0                                                            D     0     0

CSE PROGRAM            A   0     0     0    6    0   10   13   10 FACULTY   0    3  GRAD    227  A     0     0
IN DEPT OF EEN         B   1     1     1                            OTHER     0    7  UNDGR   339  B    44    75
                       M   1     1     1 NO. JOINT APPTS          0                                 M    52    50
                       D   1     1     1                                                            D     6    10

CST PROGRAM            A   1     1     1    1    0    2    0    2 FACULTY   0    0  GRAD      0  A     5     5
IN DEPT OF NEC         B   0     0     0                            OTHER     0    2  UNDGR    10  B     0     0
                       M   0     0     0 NO. JOINT APPTS          0                                 M     0     0
                       D   0     0     0                                                            D     0     0

CTE PROGRAM            A   1     1     1    3    0    0    0    0 FACULTY   0    0  GRAD      0  A    18    20
IN DEPT OF CTE         B   0     0     0                            OTHER     0    0  UNDGR   174  B     0     0
                       M   0     0     0 NO. JOINT APPTS          0                                 M     0     0
                       D   0     0     0                                                            D     0     0

DPR PROGRAM            A   0     0     0    3    0    0    0    3 FACULTY   0    0  GRAD      0  A     0     0
IN DEPT OF BAD         B   1     1     1                            OTHER     0    0  UNDGR   100  B    12    15
                       M   0     0     0 NO. JOINT APPTS          0                                 M     0     0
                       D   0     0     0                                                            D     0     0

DPR PROGRAM            A   0     0     0    5    4    8    2   10 FACULTY   2    5  GRAD      0  A     0     0
IN DEPT OF DPR         B   1     1     1                            OTHER     0    0  UNDGR    76  B    12    25
                       M   0     0     0 NO. JOINT APPTS          2                                 M     0     0
                       D   0     0     0                                                            D     0     0

DPR PROGRAM            A   1     1     1    0    0    3    8    4 FACULTY   3    0  GRAD      0  A    10    25
IN DEPT OF ENG         B   0     0     0                            OTHER     0    0  UNDGR    65  B     0     0
                       M   0     0     0 NO. JOINT APPTS          4                                 M     0     0
                       D   0     0     0                                                            D     0     0
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                                              SUMMARY BY DEGREE PROGRAMS
      GROUP (PUBLIC :DOCTORATE:10,000-19,999) CONTINUED
                                                  (AS OF JUNE 30, 1977)

  PROGRAM NAME              DEGREE LEVEL AND    *******          S T A F F         *******  MAJORS              DEGREES
    AND DEPARTMENT           YEAR OFFERED       FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED            AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE         COMP-SC OTHR  1976 - 1977         76-77 77-78

ICS PROGRAM              A    0     0     0   17   10   11   11   32 FACULTY    6     5  GRAD     70  A     0     0
IN DEPT OF ICS           B    1     1     1                          OTHER      0     0  UNDGR   270  B    72    89
                         M    1     1     1 NO. JOINT APPTS         1                                   M     3     7
                         D    1     1     1                                                             D     4     2

ISC PROGRAM              A    0     0     0   11    3    8    0   17 FACULTY    5     6  GRAD     19  A     0     0
IN DEPT OF ISC           B    1     1     1                          OTHER      0     0  UNDGR    77  B    20    30
                         M    1     1     1 NO. JOINT APPTS         0                                   M     3     6
                         D    1     1     1                                                             D     0     4

ISY PROGRAM              A    0     0     0    8    2    1    1   10 FACULTY    2     0  GRAD      0  A     0     0
IN DEPT OF BAD           B    1     1     1                          OTHER      0     0  UNDGR    30  B    10    12
                         M    0     0     0 NO. JOINT APPTS         0                                   M     0     0
                         D    0     0     0                                                             D     0     0

ISY PROGRAM              A    0     0     0    2    0   10    3    6 FACULTY    1     3  GRAD      8  A     0     0
IN DEPT OF COM           B    1     1     1                          OTHER      0     0  UNDGR   105  B    20    25
                         M    1     1     1 NO. JOINT APPTS         0                                   M     7    10
                         D    0     0     0                                                             D     0     0

ISY PROGRAM              A    1     1     0   18    2    6   16   28 FACULTY    9     6  GRAD     58  A     3    15
IN DEPT OF ISY           B    3     3     3                          OTHER      0     3  UNDGR   370  B    47    53
                         M    1     1     2 NO. JOINT APPTS         2                                   M     1     5
                         D    0     0     0                                                             D     0     0

SAN PROGRAM              A    0     0     0   10    0    0    2   11 FACULTY    0     0  GRAD      0  A     0     0
IN DEPT OF SAN           B    1     1     1                          OTHER      0     0  UNDGR   356  B    72    99
                         M    0     0     0 NO. JOINT APPTS         0                                   M     0     0
                         D    0     0     0                                                             D     0     0

SCE PROGRAM              A    0     0     0    5    1    3    8    9 FACULTY    5     1  GRAD     20  A     0     0
IN DEPT OF ENG           B    1     1     1                          OTHER      0     0  UNDGR   100  B    18    25
                         M    1     1     1 NO. JOINT APPTS         3                                   M    10    20
                         D    0     0     0                                                             D     0     0

SEN PROGRAM              A    0     0     0    0    0    0    3    1 FACULTY    0     2  GRAD      2  A     0     0
IN DEPT OF ENG           B    0     0     0                          OTHER      0     0  UNDGR     0  B     0     0
                         M    1     1     1 NO. JOINT APPTS         0                                   M     2     4
                         D    0     0     0                                                             D     0     0

SEN PROGRAM              A    0     0     0    5    4    2    0    6 FACULTY    0     4  GRAD     20  A     0     0
IN DEPT OF IEN           B    1     1     1                          OTHER      0     0  UNDGR    85  B    21    20
                         M    1     1     1 NO. JOINT APPTS         0                                   M    13    15
                         D    0     0     0                                                             D     0     0
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                                               SUMMARY BY DEGREE PROGRAMS
        GROUP (PUBLIC :DOCTORATE:20,000 PLUS  )
                                                 (AS OF JUNE 30, 1977)

 PROGRAM NAME              DEGREE LEVEL AND   *******          S T A F F            *******  MAJORS            DEGREES
   AND DEPARTMENT           YEAR OFFERED     FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED          AWARDED
                          76-77 77-78 78-79  TIME RA-S TA-S OTHR  FTE        COMP-SC OTHR  1976 - 1977       76-77 77-78

CEN PROGRAM               A    0     0     0   40   27   24    0   64 FACULTY   21   13  GRAD     75  A      0     0
IN DEPT OF EEN            B    2     3     4                           OTHER      0    0  UNDGR   349  B     77    83
                          M    1     2     2  NO. JOINT APPTS       1                                  M     16    18
                          D    1     1     2                                                           D      5     6

CIS PROGRAM               A    0     0     0   40   26   46   32   82 FACULTY   24   13  GRAD    236  A      0     0
IN DEPT OF CIS            B    2     2     2                           OTHER      1    0  UNDGR   570  B    118   134
                          M    2     2     2  NO. JOINT APPTS       6                                  M     75    78
                          D    1     1     1                                                           D      5    14

CSC PROGRAM               A    0     0     0   28   13   21   25   64 FACULTY   13   20  GRAD    111  A      0     0
IN DEPT OF CIS            B    1     3     3                           OTHER      0    0  UNDGR   360  B    100   140
                          M    2     2     3  NO. JOINT APPTS       3                                  M     29    32
                          D    1     1     2                                                           D      5     5

CSC PROGRAM               A    0     0     0  333  246  377  155  571 FACULTY  165  177  GRAD   2275  A      0     0
IN DEPT OF CSC            B   18    19    19                           OTHER      4    3  UNDGR  4677  B    973  1172
                          M   20    21    21  NO. JOINT APPTS     112                                  M    492   551
                          D   18    18    19                                                           D     87   111

CSC PROGRAM               A    0     0     0   45    0   30    0   55 FACULTY   10   35  GRAD     26  A      0     0
IN DEPT OF EEN            B    1     1     1                           OTHER      0    0  UNDGR   113  B     17    20
                          M    1     1     1  NO. JOINT APPTS       0                                  M      7    10
                          D    0     0     0                                                           D      1     0

CSC PROGRAM               A    0     0     0    4    0    2    0    5 FACULTY    1    3  GRAD     25  A      0     0
IN DEPT OF IEN            B    1     1     1                           OTHER      0    0  UNDGR    42  B      3     8
                          M    1     1     1  NO. JOINT APPTS       0                                  M      8    10
                          D    1     1     1                                                           D      2     2

CSC PROGRAM               A    0     0     0   17    0   15    3   29 FACULTY   10   10  GRAD     76  A      0     0
IN DEPT OF MAT            B    4     5     5                           OTHER      0    0  UNDGR   429  B     75   118
                          M    4     4     4  NO. JOINT APPTS       3                                  M     19    22
                          D    1     1     1                                                           D      1     6

CSC PROGRAM               A    0     0     0    0    0    0    0    0 FACULTY    0    0  GRAD      0  A      0     0
IN DEPT OF MSC            B    1     1     1                           OTHER      0    0  UNDGR     0  B      0     0
                          M    1     1     1  NO. JOINT APPTS       0                                  M      0     0
                          D    0     0     0                                                           D      0     0

CSC PROGRAM               A    0     0     0    0    0    0    0    0 FACULTY    0    0  GRAD      0  A      0     0
IN DEPT OF NEC            B    1     1     1                           OTHER      0    0  UNDGR    91  B     29    35
                          M    0     0     0  NO. JOINT APPTS       0                                  M      0     0
                          D    0     0     0                                                           D      0     0

CSC PROGRAM               A    0     0     0   11    0    9    2   11 FACULTY   13    1  GRAD     50  A      0     0
IN DEPT OF SCS            B    1     1     1                           OTHER      0    0  UNDGR   536  B     49    60
                          M    1     1     1  NO. JOINT APPTS       2                                  M      5     8
                          D    1     1     1                                                           D      4     6

CSE PROGRAM               A    0     0     0    8    7    4    0   13 FACULTY    8    0  GRAD     25  A      0     0
IN DEPT OF CSE            B    1     1     1                           OTHER      0    0  UNDGR    95  B     25    28
                          M    1     1     1  NO. JOINT APPTS       0                                  M     11    10
                          D    1     1     1                                                           D      1     3

CSE PROGRAM               A    0     0     0   22    7    9    6   27 FACULTY    3   18  GRAD    233  A      0     0
IN DEPT OF EEN            B    3     3     3                           OTHER      0    0  UNDGR   480  B     71    98
                          M    2     2     2  NO. JOINT APPTS       1                                  M     35    57
                          D    2     2     2                                                           D      6     6

CST PROGRAM               A    0     0     0    1    0    0    4    2 FACULTY    0    5  GRAD      0  A      0     0
IN DEPT OF ENG            B    1     1     1                           OTHER      0    0  UNDGR    57  B      7    10
                          M    0     0     0  NO. JOINT APPTS       0                                  M      0     0
                          D    0     0     0                                                           D      0     0

CTE PROGRAM               A    1     1     1    2    0    0    1    2 FACULTY    0    0  GRAD      0  A      2     2
IN DEPT OF CTE            B    0     0     0                           OTHER      0    0  UNDGR    37  B      0     0
                          M    0     0     0  NO. JOINT APPTS       0                                  M      0     0
                          D    0     0     0                                                           D      0     0

DPR PROGRAM               A    0     0     0    5    0    4    3    6 FACULTY    3    3  GRAD     39  A      0     0
IN DEPT OF BAD            B    1     1     1                           OTHER      0    0  UNDGR    25  B     15    30
                          M    1     1     1  NO. JOINT APPTS       1                                  M     18    20
                          D    1     1     1                                                           D      0     1

DPR PROGRAM               A    1     1     1    3    0    1    3    4 FACULTY    0    0  GRAD      0  A     55    68
IN DEPT OF BUS            B    0     0     0                           OTHER      0    0  UNDGR   342  B      0     0
                          M    0     0     0  NO. JOINT APPTS       0                                  M      0     0
                          D    0     0     0                                                           D      0     0

DPR PROGRAM               A    1     1     1    4    0    0    1    4 FACULTY    0    0  GRAD      0  A     32    35
IN DEPT OF CPR            B    0     0     0                           OTHER      0    0  UNDGR    75  B      0     0
                          M    0     0     0  NO. JOINT APPTS       0                                  M      0     0
                          D    0     0     0                                                           D      0     0
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                                             SUMMARY BY CEGREE PROGRAMS
        GROUP (PUBLIC :DOCTORATE:20,000 PLUS  ) CONTINUED
                                                 (AS OF JUNE 30, 1977)

  PROGRAM NAME           DEGREE LEVEL AND   *******          S T A F F         *******  MAJORS           DEGREES
    AND DEPARTMENT         YEAR OFFERED     FULL **PART  TIME**  TOT *** COCTORATES ***  ENROLLED         AWARDED
                         76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE       COMP-SC CTHR  1976 - 1977      76-77 77-78

ISY PROGRAM            A   0     0     0     9    0    2    1   11 FACULTY   2     5  GRAD     18  A      0     0
IN DEPT OF BAC         B   2     2     2                           CTHER     0     1  UNDGR    30  B     10    15
                       M   1     1     1  NO. JOINT APPTS        1                                 M      8    10
                       D   1     1     1                                                           D      0     0

ISY PROGRAM            A   0     0     0     4    4    7    5    4 FACULTY   1     4  GRAD     40  A      0     0
IN DEPT OF IEN         B   1     1     1                           OTHER     4     0  UNDGR    59  B     17    16
                       M   1     1     1  NO. JOINT APPTS        0                                 M     15    15
                       D   1     1     1                                                           D      1     2

ISY PROGRAM            A   0     0     0    22   11   46    0   55 FACULTY  14     3  GRAD    116  A      0     0
IN DEPT OF ISY         B   1     1     1                           CTHER     0     0  UNDGR    78  B     15    20
                       M   1     1     1  NO. JOINT APPTS        2                                 M     30    40
                       D   1     1     1                                                           D      4     5

ISY PROGRAM            A   0     0     0     9    2    2    4   10 FACULTY   7     0  GRAD      0  A      0     0
IN DEPT OF NEC         B   1     1     1                           OTHER     0     0  UNDGR   160  B     30    40
                       M   0     0     0  NO. JCINT APPTS        0                                 M      0     0
                       D   0     0     0                                                           D      0     0

OTH PROGRAM            A   0     0     0    16    9   15   15   29 FACULTY   2    13  GRAD     98  A      0     0
IN DEPT OF BAD         D   2     2     2                           OTHER     0     0  UNDGR   468  B     70    85
                       M   2     2     2  NO. JOINT APPTS        0                                 M     14    18
                       D   2     2     2                                                           D      1     3

OTH PROGRAM            A   0     0     0    22   10   12    1   32 FACULTY   1    14  GRAD     33  A      0     0
IN DEPT OF EEN         B   2     2     2                           OTHER     0     0  UNDGR   268  B     44    50
                       M   1     1     1  NO. JOINT APPTS       13                                 M     16    16
                       D   1     1     1                                                           D      1     1

OTH PROGRAM            A   0     0     0     0    0    1    2    1 FACULTY   0     0  GRAD      2  A      0     0
IN DEPT OF NEC         B   0     0     0                           CTHER     0     0  UNDGR     0  B      0     0
                       M   1     1     1  NO. JOINT APPTS        0                                 M      2     1
                       D   0     0     0                                                           D      0     0

SYS PROGRAM            A   0     0     0     0    0    0   20    6 FACULTY   3    16  GRAD     26  A      0     0
IN DEPT OF CSC         B   0     0     0                           OTHER     0     0  UNDGR     0  B      0     0
                       M   1     1     1  NO. JOINT APPTS       20                                 M      2     3
                       D   0     0     0                                                           D      0     0
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INVENTORY OF COMPUTERS, APPLICATICNS CF COMPUTERS, ANC INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONCUCTED AY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSCURI-ROLLA
                        UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                     PAGE IX-28

                                                SUMMARY PY CEGREE PROGRAMS
        GROUP (PRIVATE;ASSOCIATE;BELOW 500     )
                                                (AS OF JUNE 30, 1977)

 PROGRAM NAME             DFGRFE LEVEL AND    *******          S T A F F            ******* MAJORS          DEGREES
    AND CEPARTMENT          YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED        AWARDED
                          76-77 77-78 79-79 TIME RA-S TA-S CTHR  FTE        COMP-SC OTHR 1976 - 1977      76-77 77-78

CPR PROGRAM               A   1     1     1    0    0    0    1    1 FACULTY    0      0  GRAD      0  A     0     0
IN DEPT CF MAT            B   0     0     0                          OTHER      0      0  UNDGR     0  B     0     0
                          M   0     0     0  NO. JOINT APPTS       1                                   M     0     0
                          D   0     0     0                                                            D     0     0

CSC PROGRAM               A   0     0     1    1    0    2    0    2 FACULTY    0      0  GRAD      0  A     0     0
IN DEPT OF CSC            B   0     0     0                          CTHER      0      0  UNDGR    15  B     0     0
                          M   0     0     0  NO. JOINT APPTS       2                                   M     0     0
                          D   0     0     0                                                            D     0     0

DPR PROGRAM               A   2     2     2    2    0    1    3    3 FACULTY    0      0  GRAD      0  A    14    17
IN DEPT CF DPR            B   0     0     0                          OTHER      0      0  UNDGR    70  B     0     0
                          M   0     0     0  NO. JOINT APPTS       3                                   M     0     0
                          D   0     0     0                                                            D     0     0
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INVENTORY OF COMPUTERS, APPLICATICNS OF CUMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONCUCTED AY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                        UNCER A GRANT FRCM THE NATIONAL SCIENCE FCUNDATION

                                                SUMMARY BY CEGREE PROGRAMS
        GROUP (PRIVATE;ASSOCIATF:500-2499      )
                                                (AS OF JUNE 30, 1977)

 PROGRAM NAME             CEGRFE LEVEL AND    *******          S T A F F            ******* MAJORS          DEGREES
    AND DEPARTMENT          YEAR OFFERED      FULL **PART  TIME**  TCT *** DOCTORATES *** ENROLLED        AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE        COMP-SC OTHR 1976 - 1977      76-77 77-78

CPR PROGRAM               A   1     1     1    3    0    3    1    5 FACULTY    0      1  GRAD      0  A    42    50
IN DEPT OF BAD            B   0     0     0                          CTHER      0      1  UNDGR    70  B     0     0
                          M   0     0     0  NO. JOINT APPTS       2                                   M     0     0
                          D   0     0     0                                                            D     0     0

CPR PROGRAM               A   1     1     1    2    0    0    2    3 FACULTY    0      0  GRAD      0  A    30    35
IN DEPT CF CPR            B   0     0     0                          CTHER      0      0  UNDGR   153  B     0     0
                          M   0     0     0  NO. JCINT APPTS       0                                   M     0     0
                          D   0     0     0                                                            D     0     0

CST PROGRAM               A   1     1     1    3    0    0    0    3 FACULTY    0      0  GRAD      0  A     7    10
IN DEPT OF CSC            B   0     0     0                          CTHER      0      0  UNDGR    30  B     0     0
                          M   0     0     0  NO. JOINT APPTS       0                                   M     0     0
                          D   0     0     0                                                            D     0     0

DPR PRCGRAM               A   1     1     1    2    0    5    0    4 FACULTY    0      0  GRAD      0  A    22    25
IN DEPT OF BAD            B   0     0     0                          OTHER      0      0  UNDGR    7C  B     0     0
                          M   0     0     0  NC. JOINT APPTS       1                                   M     0     0
                          D   0     0     0                                                            D     0     0
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INVENTCRY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                           UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                PAGE IX-29

                                                         SUMMARY BY CEGREE PROGRAMS
      GROUP (PRIVATE:ASSOCIATE:2500-9999    )
                                                        (AS OF JUNE 30, 1977)

PROGRAM NAME               DEGREE LEVEL AND    *******           S T A F F        ******* MAJORS          DEGREES
  AND DEPARTMENT             YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED        AWARDED
                             76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE        COMP-SC OTHR 1976 - 1977    76-77 77-78

DPR PROGRAM                A     1     1     1    0    0    2    0    1 FACULTY     0    0 GRAD      0 A      5     6
IN DEPT OF BAD             B     0     0     0                          CTHER       0    0 UNDGR    24 B      0     0
                           M     0     0     0 NO. JOINT APPTS        0                                 M      0     0
                           D     0     0     0                                                          D      0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSCURI-ROLLA
                           UNDER A GRANT FRCM THE NATIONAL SCIENCE FOUNDATION

                                                         SUMMARY BY CEGREE PROGRAMS
      GROUP (PRIVATE:BACHELCRS:BELOW 500    )
                                                        (AS OF JUNE 30, 1977)

PROGRAM NAME               CEGREE LEVEL AND    *******           S T A F F        ******* MAJORS          DEGREES
  AND DEPARTMENT             YEAR CFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED        AWARDED
                             76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE        COMP-SC CTHR 1976 - 1977    76-77 77-78

CSC PROGRAM                A     1     1     1    1    1    2    0    3 FACULTY     0    0 GRAD      0 A      0     0
IN DEPT OF CSC             B     0     0     0                          CTHER       0    0 UNDGR     0 B      0     0
                           M     0     0     0 NO. JOINT APPTS        1                                 M      0     0
                           D     0     0     0                                                          D      0     0

OTH PROGRAM                A     0     0     0    2    0    0    0    2 FACULTY     0    2 GRAD      0 A      0     0
IN DEPT OF MAT             B     0     0     1                          OTHER       0    0 UNDGR     0 B      0     0
                           M     0     0     0 NO. JOINT APPTS        0                                 M      0     0
                           D     0     0     0                                                          D      0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                            UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                              SUMMARY BY DEGREE PROGRAMS
        GROUP (PRIVATE:BACHELORS:500-2499       )
                                               (AS OF JUNE 30, 1977)

 PROGRAM NAME              DEGREE LEVEL AND     *******          S T A F F          *******  MAJORS              DEGREES
   AND DEPARTMENT           YEAR OFFERED        FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED            AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE         COMP-SC OTHR  1976 - 1977       76-77 77-78

CPR PROGRAM                A   1     1     1     3    0    0    3    4 FACULTY    0     0  GRAD      0  A     8    12
IN DEPT OF CPR             B   1     1     1                           OTHER      0     0  UNDGR    70  B     9    12
                           M   0     0     0  NO. JOINT APPTS        0                                  M     0     0
                           D   0     0     0                                                            D     0     0

CPR PROGRAM                A   1     1     1     1    0    0    0    1 FACULTY    0     0  GRAD      0  A     1     2
IN DEPT OF MAT             B   0     0     0                           OTHER      0     0  UNDGR     6  B     0     0
                           M   0     0     0  NO. JOINT APPTS        0                                  M     0     0
                           D   0     0     0                                                            D     0     0

CSC PROGRAM                A   3     3     3     1    0    3    5    4 FACULTY    0     4  GRAD      0  A     9     7
IN DEPT OF BAD             B   1     1     1                           OTHER      0     0  UNDGR    48  B     2     2
                           M   0     0     0  NO. JOINT APPTS        4                                  M     0     0
                           D   0     0     0                                                            D     0     0

CSC PROGRAM                A   3     3     3    10    0    0    8   12 FACULTY    1    10  GRAD      6  A     1    10
IN DEPT OF CSC             B   5     5     5                           OTHER      0     1  UNDGR   162  B    28    53
                           M   0     0     0  NO. JOINT APPTS       15                                  M     0     0
                           D   0     0     0                                                            D     0     0

CSC PROGRAM                A   2     2     2    13    1    1    9   18 FACULTY    3     9  GRAD      0  A     3     8
IN DEPT OF MAT             B   6     7     7                           OTHER      0     0  UNDGR    46  B    13     8
                           M   0     0     0  NO. JOINT APPTS       11                                  M     0     0
                           D   0     0     0                                                            D     0     0

CSC PROGRAM                A   0     0     0     7    1    1    3    8 FACULTY    1     4  GRAD      0  A     0     0
IN DEPT OF MSC             B   3     3     3                           OTHER      0     0  UNDGR    54  B    11    17
                           M   0     0     0  NO. JOINT APPTS        4                                  M     0     0
                           D   0     0     0                                                            D     0     0

CSC PROGRAM                A   0     0     0     0    0    0    4    2 FACULTY    1     1  GRAD      0  A     0     0
IN DEPT OF NEC             B   1     1     1                           OTHER      0     0  UNDGR    21  B     7     3
                           M   0     0     0  NO. JOINT APPTS        4                                  M     0     0
                           D   0     0     0                                                            D     0     0

DPR PROGRAM                A   0     0     0     1    0    0    2    2 FACULTY    0     0  GRAD      0  A     0     0
IN DEPT OF BAD             B   1     1     1                           OTHER      0     0  UNDGR    31  B    17    15
                           M   0     0     0  NO. JOINT APPTS        0                                  M     0     0
                           D   0     0     0                                                            D     0     0

DPR PROGRAM                A   1     1     1     3    0    0    0    3 FACULTY    0     0  GRAD      0  A     2     2
IN DEPT OF BUS             B   0     0     0                           OTHER      0     0  UNDGR     6  B     0     0
                           M   0     0     0  NO. JOINT APPTS        3                                  M     0     0
                           D   0     0     0                                                            D     0     0

DPR PROGRAM                A   1     1     1     2    0    0    0    2 FACULTY    0     0  GRAD      0  A     4     6
IN DEPT OF DPR             B   1     1     1                           OTHER      0     0  UNDGR    45  B     2    10
                           M   0     0     0  NO. JOINT APPTS        0                                  M     0     0
                           D   0     0     0                                                            D     0     0

ISC PROGRAM                A   1     1     1     1    0    3    1    2 FACULTY    0     1  GRAD      0  A     0     0
IN DEPT OF ISC             B   1     1     1                           OTHER      0     0  UNDGR     4  B     0     1
                           M   0     0     0  NO. JOINT APPTS        1                                  M     0     0
                           D   0     0     0                                                            D     0     0

ISY PROGRAM                A   1     1     1     2    0    0    4    3 FACULTY    0     0  GRAD      0  A     2     2
IN DEPT OF ISY             B   1     1     1                           OTHER      0     0  UNDGR    70  B    18    15
                           M   0     0     0  NO. JOINT APPTS        0                                  M     0     0
                           D   0     0     0                                                            D     0     0

OTH PROGRAM                A   0     0     0     3    0    0    2    4 FACULTY    0     3  GRAD      0  A     0     0
IN DEPT OF CSC             B   1     1     1                           OTHER      0     0  UNDGR     0  B     0     0
                           M   0     0     0  NO. JOINT APPTS        0                                  M     0     0
                           D   0     0     0                                                            D     0     0

OTH PROGRAM                A   0     0     0     9    0    4    2   11 FACULTY    0     7  GRAD      0  A     0     0
IN DEPT OF MAT             B   3     3     3                           OTHER      0     2  UNDGR    32  B    12    17
                           M   0     0     0  NO. JOINT APPTS        1                                  M     0     0
                           D   0     0     0                                                            D     0     0

OTH PROGRAM                A   0     0     0     4    0    0    0    4 FACULTY    0     2  GRAD      0  A     0     0
IN DEPT OF MSC             B   1     1     1                           OTHER      0     0  UNDGR    17  B     5     5
                           M   0     0     0  NO. JOINT APPTS        0                                  M     0     0
                           D   0     0     0                                                            D     0     0
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INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATICN FUR 1976-77
              CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                        UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                              SUMMARY BY DEGREE PROGRAMS
     GROUP (PRIVATE:BACHELORS:2500-9999     )
                                                (AS OF JUNE 30, 1977)

 PROGRAM NAME            DEGREE LEVEL AND    *******        S T A F F          ******* MAJORS          DEGREES
    AND DEPARTMENT         YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED       AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE        COMP-SC CTHR  1976 - 1977    76-77 77-78

CSC PROGRAM              A   1     1     1     2    0   15    4    8 FACULTY    3    4 GRAD       0 A    12    12
IN DEPT OF CSC           B   0     2     2                           OTHER      0    0 UNDGR     45 B     0     3
                         M   0     0     0  NO. JOINT APPTS        1                                M     0     0
                         D   0     0     0                                                          D     0     0

CSC PROGRAM              A   1     1     1     1    0    0    4    4 FACULTY    0    0 GRAD       0 A    20    20
IN DEPT OF CPR           B   0     0     0                           OTHER      0    0 UNDGR     75 B     0     0
                         M   0     0     0  NO. JOINT APPTS        0                                M     0     0
                         D   0     0     0                                                          D     0     0

DPR PROGRAM              A   1     1     1     1    0    0    5    4 FACULTY    0    0 GRAD       0 A     3     5
IN DEPT OF DPR           B   1     1     1                           CTHER      0    0 UNDGR    125 B    10    10
                         M   0     0     0  NO. JOINT APPTS        0                                M     0     0
                         D   0     0     0                                                          D     0     0

ISY PROGRAM              A   0     0     0     2    0    0    3    4 FACULTY    0    0 GRAD       0 A     0     0
IN DEPT OF BAD           B   1     1     1                           OTHER      0    0 UNDGR     38 B    64    12
                         M   0     0     0  NO. JOINT APPTS        0                                M     0     0
                         D   0     0     0                                                          D     0     0

OTH PROGRAM              A   0     0     0     2    0    0    2    3 FACULTY    0    1 GRAD       0 A     0     0
IN DEPT OF COM           B   1     1     1                           CTHER      0    0 UNDGR      0 B     0     4
                         M   0     0     0  NO. JOINT APPTS        0                                M     0     0
                         D   0     0     0                                                          D     0     0
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                                                SUMMARY BY DEGREE PROGRAMS
    GROUP (PRIVATE;MASTERS  ;500-2499      )
                                                 (AS OF JUNE 30, 1977)

 PROGRAM NAME            DEGREE LEVEL AND    *******        S T A F F        *******  MAJORS           DEGREES
   AND DEPARTMENT          YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED         AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE        COMP-SC OTHR  1976 - 1977      76-77 77-78

CSC PROGRAM             A    0     0     0    0    0    0    2    1 FACULTY    0     0  GRAD      0 A      0     0
IN DEPT OF BUS          B    1     1     1                          OTHER      0     0  UNDGR    12 B      3     2
                        M    0     0     0  NO. JOINT APPTS       0                                  M      0     0
                        D    0     0     0                                                           D      0     0

CSC PROGRAM             A    1     1     1    1    0    0    0    1 FACULTY    0     0  GRAD      0 A      0     0
IN DEPT OF CCS          B    0     0     0                          OTHER      0     0  UNDGR     0 B      0     0
                        M    0     0     0  NO. JOINT APPTS       0                                  M      0     0
                        D    0     0     0                                                           D      0     0

CSC PROGRAM             A    0     0     0   15    0    8   12   25 FACULTY    4    12  GRAD     20 A      0     0
IN DEPT OF CSC          B    8     9     9                          OTHER      0     0  UNDGR   313 B     57    84
                        M    1     1     1  NO. JOINT APPTS       9                                  M      0     0
                        D    0     0     0                                                           D      0     0

CSC PROGRAM             A    2     2     2    2    0    1    1    3 FACULTY    0     2  GRAD      0 A      4     5
IN DEPT OF MAT          B    1     1     1                          OTHER      0     0  UNDGR    33 B      0     2
                        M    0     0     0  NO. JOINT APPTS       1                                  M      0     0
                        D    0     0     0                                                           D      0     0

DPR PROGRAM             A    0     0     0    1    0    0    0    1 FACULTY    0     0  GRAD      0 A      0     0
IN DEPT OF BAD          B    1     1     1                          OTHER      0     0  UNDGR    20 B      3     5
                        M    0     0     0  NO. JOINT APPTS       0                                  M      0     0
                        D    0     0     0                                                           D      0     0

DPR PROGRAM             A    0     0     0    4    0    0    3    7 FACULTY    0     0  GRAD      0 A      0     0
IN DEPT OF DPR          B    1     1     1                          OTHER      0     0  UNDGR     5 B      0     2
                        M    0     0     0  NO. JOINT APPTS       0                                  M      0     0
                        D    0     0     0                                                           D      0     0

ICS PROGRAM             A    1     1     1    1    0    0    5    2 FACULTY    1     1  GRAD      0 A      2     5
IN DEPT OF ICS          B    1     1     1                          OTHER      0     0  UNDGR    75 B     10    15
                        M    0     0     0  NO. JOINT APPTS       2                                  M      0     0
                        D    0     0     0                                                           D      0     0

ISC PROGRAM             A    0     0     0    3    0    0    4    5 FACULTY    0     3  GRAD      0 A      0     0
IN DEPT OF BAD          B    0     1     1                          OTHER      0     0  UNDGR     0 B      0     0
                        M    0     0     0  NO. JOINT APPTS       1                                  M      0     0
                        D    0     0     0                                                           D      0     0

ISC PROGRAM             A    0     0     0    1    0    0    0    1 FACULTY    0     1  GRAD      0 A      0     0
IN DEPT OF MAT          B    1     1     1                          OTHER      0     0  UNDGR     0 B      0     0
                        M    0     0     0  NO. JOINT APPTS       1                                  M      0     0
                        D    0     0     0                                                           D      0     0

OTH PROGRAM             A    0     0     0    2    0    4    0    1 FACULTY    0     1  GRAD      0 A      0     0
IN DEPT OF ENG          B    0     1     1                          OTHER      0     0  UNDGR    12 B      3     6
                        M    0     0     0  NO. JOINT APPTS       0                                  M      0     0
                        D    0     0     0                                                           D      0     0

OTH PROGRAM             A    1     1     1    9    0    1    3    9 FACULTY    0     4  GRAD      0 A      2     4
IN DEPT OF MAT          B    2     2     2                          OTHER      0     0  UNDGR    66 B     10    12
                        M    0     0     0  NO. JOINT APPTS       1                                  M      0     0
                        D    0     0     0                                                           D      0     0

OTH PROGRAM             A    0     0     0   11    0    0    0   11 FACULTY    0    10  GRAD      0 A      0     0
IN DEPT OF MSC          B    2     2     2                          OTHER      0     0  UNDGR    30 B      9    13
                        M    0     0     0  NO. JOINT APPTS       0                                  M      0     0
                        D    0     0     0                                                           D      0     0

OTH PROGRAM             A    0     0     0    1    0    0    4    2 FACULTY    0     4  GRAD      0 A      0     0
IN DEPT OF NEC          B    1     1     1                          OTHER      0     0  UNDGR    20 B      4     6
                        M    0     0     0  NO. JOINT APPTS       0                                  M      0     0
                        D    0     0     0                                                           D      0     0
 INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                    CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                   SUMMARY BY DEGREE PROGRAMS
        GROUP (PRIVATE:MASTERS  :2500-9999    )
                                                    (AS OF JUNE 30, 1977)

  PROGRAM NAME                 DEGREE LEVEL AND    *******          S T A F F        *******  MAJORS            DEGREES
    AND DEPARTMENT              YEAR OFFERED     *FULL **PART  TIME** TOT *** DOCTORATES ***  ENROLLED          AWARDED
                               76-77 77-78 78-79 TIME RA-S TA-S OTHR FTE        COMP-SC OTHR  1976 - 1977       76-77 77-78

CIS PROGRAM                A    1    1    1     3    0    0    0    3 FACULTY    1    0  GRAD      0  A     0    10
IN DEPT OF CIS             B    1    1    1                          OTHER      0    0  UNDGR    75  B     6    20
                           M    0    0    0  NO. JOINT APPTS         0                                M     0     0
                           D    0    0    0                                                           D     0     0

CPR PROGRAM                A    0    0    0     2    0    0    0    2 FACULTY    0    2  GRAD      0  A     0     0
IN DEPT OF MAT             B    1    1    1                          OTHER      0    0  UNDGR    10  B     0     5
                           M    0    0    0  NO. JOINT APPTS         2                                M     0     0
                           D    0    0    0                                                           D     0     0

CSC PROGRAM                A    0    0    0    11    2    0    7   17 FACULTY    4    3  GRAD     31  A     0     0
IN DEPT OF CIS             B    3    3    3                          OTHER      1    0  UNDGR   118  B    44    33
                           M    1    1    1  NO. JOINT APPTS         5                                M     1     4
                           D    0    0    0                                                           D     0     0

CSC PROGRAM                A    4    4    4    21    1    5    9   20 FACULTY    5    8  GRAD     10  A     8    11
IN DEPT OF CSC             B    8    8    8                          OTHER      4    0  UNDGR   351  B    76    94
                           M    1    2    2  NO. JOINT APPTS         9                                M     4     2
                           D    0    0    0                                                           D     0     0

CSC PROGRAM                A    0    0    0     9    0    0    0    9 FACULTY    0    6  GRAD      0  A     0     0
IN DEPT OF MSC             B    1    1    1                          OTHER      0    0  UNDGR    10  B     4     9
                           M    0    0    0  NO. JOINT APPTS         0                                M     0     0
                           D    0    0    0                                                           D     0     0

CSC PROGRAM                A    0    0    0    11    0    0   15   19 FACULTY    3   11  GRAD      0  A     0     0
IN DEPT OF NEC             B    3    4    4                          OTHER      0    0  UNDGR   199  B    19    38
                           M    0    0    0  NO. JOINT APPTS        10                                M     0     0
                           D    0    0    0                                                           D     0     0

CST PROGRAM                A    0    0    0    10    5    4    0   22 FACULTY    1    3  GRAD     40  A     0     0
IN DEPT OF IEN             B    1    1    1                          OTHER      8    0  UNDGR    37  B     5    37
                           M    1    1    1  NO. JOINT APPTS         3                                M    15    40
                           D    0    0    0                                                           D     0     0

CTE PROGRAM                A    1    1    1     0    0    6    0    3 FACULTY    0    0  GRAD      0  A     2     4
IN DEPT OF BAD             B    0    0    0                          OTHER      0    0  UNDGR    10  B     0     0
                           M    0    0    0  NO. JOINT APPTS         2                                M     0     0
                           D    0    0    0                                                           D     0     0

DPR PROGRAM                A    1    1    1     0    0    0    5    3 FACULTY    0    0  GRAD      0  A     0     2
IN DEPT OF BAD             B    1    1    1                          OTHER      0    0  UNDGR    72  B     9    11
                           M    0    0    0  NO. JOINT APPTS         0                                M     0     0
                           D    0    0    0                                                           D     0     0

ISY PROGRAM                A    0    0    0     3    0    0    4    5 FACULTY    1    2  GRAD     89  A     0     0
IN DEPT OF BAD             B    1    1    1                          OTHER      0    0  UNDGR    21  B     3     4
                           M    1    1    1  NO. JOINT APPTS         2                                M    10    11
                           D    0    0    0                                                           D     0     0

ISY PROGRAM                A    0    0    0     8    0    0    2    8 FACULTY    2    0  GRAD      0  A     0     0
IN DEPT OF CIS             B    1    1    1                          OTHER      0    0  UNDGR   125  B    25    25
                           M    0    0    0  NO. JOINT APPTS         0                                M     0     0
                           D    0    0    0                                                           D     0     0

ISY PROGRAM                A    1    1    1     4    0    0    5    6 FACULTY    1    0  GRAD      0  A     5     5
IN DEPT OF ISY             B    1    1    1                          OTHER      0    0  UNDGR   150  B    17    25
                           M    0    0    1  NO. JOINT APPTS         0                                M     0     0
                           D    0    0    0                                                           D     0     0

OTH PROGRAM                A    0    0    0     0    0    0    0    0 FACULTY    0    0  GRAD      0  A     0     0
IN DEPT OF COM             B    0    1    1                          OTHER      0    0  UNDGR     0  B     0     3
                           M    0    0    0  NO. JOINT APPTS         0                                M     0     0
                           D    0    0    0                                                           D     0     0

OTH PROGRAM                A    0    0    0    13    0    0    1   13 FACULTY    2    6  GRAD      0  A     0     0
IN DEPT OF NEC             B    1    1    1                          OTHER      0    0  UNDGR   140  B    29    50
                           M    0    0    0  NO. JOINT APPTS         0                                M     0     0
                           D    0    0    0                                                           D     0     0
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INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                    CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                       SUMMARY BY DEGREE PROGRAMS
        GROUP (PRIVATE:MASTERS  :10,000-19,999)
                                                        (AS OF JUNE 30, 1977)

  PROGRAM NAME          DEGREE LEVEL AND     *******           S T A F F          *******  MAJORS           DEGREES
    AND DEPARTMENT        YEAR OFFERED       FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED         AWARDED
                        76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE       COMP-SC CTHR  1976 - 1977      76-77 77-78

CSC PROGRAM           A   0     0     0    25    1   12   29   36 FACULTY     6     8  GRAD    200  A     0     0
IN DEPT OF CSC        B   3     3     3                            CTHER      0     0  UNDGR   667  B    85   100
                      M   2     2     2  NO. JOINT APPTS           7                                 M    43    57
                      D   0     0     0                                                              D     0     0

NEC PROGRAM           A   0     0     0     6    0    2    2    8 FACULTY     0     0  GRAD     62  A     0     0
IN DEPT OF NEC        B   0     0     0                            OTHER      0     0  UNDGR     0  B     0     0
                      M   1     1     1  NC. JOINT APPTS           0                                 M    31    20
                      D   0     0     0                                                              D     0     0
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INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATICN FOR 1976-77
                    CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSCURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                       SUMMARY BY DEGREE PROGRAMS
        GROUP (PRIVATE:DCCTORATE:500-2499      )
                                                        (AS OF JUNE 30, 1977)

  PROGRAM NAME          CEGREE LEVEL AND     *******           S T A F F          *******  MAJORS           DEGREES
    AND CEPARTMENT        YEAR CFFERED       FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED         AWARDED
                        76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE       COMP-SC OTHR  1976 - 1977      76-77 77-78

OTH PROGRAM           A   0     0     0     5    8    5    0    8 FACULTY     0     3  GRAD     12  A     0     0
IN DEPT OF CSC        B   0     0     0                            CTHER      1     0  UNDGR     0  B     0     0
                      M   1     1     1  NO. JOINT APPTS           2                                 M     8     7
                      D   1     1     1                                                              D     0     3

OTH PROGRAM           A   0     0     0     4    0    1    6    7 FACULTY     8     2  GRAD     50  A     0     0
IN DEPT OF EEN        B   1     1     1                            CTHER      0     0  UNDGR    19  B     6     6
                      M   1     1     1  NO. JOINT APPTS           0                                 M    22    22
                      D   1     1     1                                                              D     0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                           UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                  PAGE IX-35

                                                       SUMMARY BY DEGREE PROGRAMS
       GROUP (PRIVATE:DOCTORATE:2500-9999     )
                                                        (AS OF JUNE 30, 1977)

PROGRAM NAME              DEGREE LEVEL AND    *******           S T A F F          *******  MAJORS           DEGREES
   AND DEPARTMENT           YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES ***   ENROLLED         AWARDED
                          76-77 77-78 78-79   TIME RA-S TA-S CTHR  FTE         COMP-SC OTHR 1976 - 1977      76-77 77-78

CEN PROGRAM               A    0     0     0     8   15   11    0   34 FACULTY    7     1  GRAD     60  A     0     0
IN DEPT OF CSE            B    1     1     1                            OTHER     0     0  UNDGR   115  B    24    20
                          M    1     1     1  NO. JOINT APPTS        0                                  M     9     6
                          D    1     1     1                                                            D     3     3

CSC PROGRAM               A    0     0     0    14   10    0    0   17 FACULTY    2    10  GRAD    202  A     0     0
IN DEPT OF COM            B    1     1     1                            OTHER     0     0  UNDGR    79  B    10    15
                          M    1     1     1  NO. JOINT APPTS        0                                  M    50    55
                          D    0     0     0                                                            D     0     0

CSC PROGRAM               A    0     0     0    51   17   44   43   78 FACULTY   30    17  GRAD    451  A     0     0
IN DEPT OF CSC            B    7     7     7                            OTHER     0     1  UNDGR   693  B    94   118
                          M    6     6     6  NO. JOINT APPTS       12                                  M    43    68
                          D    3     4     4                                                            D     1     7

CSC PROGRAM               A    0     0     0     8    0    1   10   12 FACULTY    5     3  GRAD    212  A     0     0
IN DEPT OF EEN            B    1     1     1                            OTHER     3     6  UNDGR    53  B     0     0
                          M    1     1     1  NO. JOINT APPTS        1                                  M     0     0
                          D    1     1     1                                                            D     0     0

CSC PROGRAM               A    0     0     0    18    0    7   23   26 FACULTY    3    14  GRAD     48  A     0     0
IN DEPT OF MAT            B    3     4     4                            OTHER     0    11  UNDGR    60  B    17    19
                          M    2     3     3  NO. JOINT APPTS       17                                  M    11    15
                          D    0     0     0                                                            D     0     0

CSC PROGRAM               A    0     0     0     8    1    6    1    9 FACULTY    2     4  GRAD     42  A     0     0
IN DEPT OF MSC            B    2     2     2                            OTHER     1     0  UNDGR   214  B    33    42
                          M    1     1     1  NO. JOINT APPTS        0                                  M    23    26
                          D    1     1     1                                                            D     0     1

CSC PROGRAM               A    0     0     0     5    5    0    6   10 FACULTY    2     9  GRAD     35  A     0     0
IN DEPT OF NEC            B    1     1     1                            OTHER     0     0  UNDGR    51  B    19    20
                          M    1     1     1  NO. JOINT APPTS        6                                  M     9    10
                          D    1     1     1                                                            D     1     1

CSE PROGRAM               A    0     0     0     5    0    0    1    6 FACULTY    0     3  GRAD      0  A     0     0
IN DEPT OF EEN            B    1     1     1                            OTHER     0     0  UNDGR     5  B     1     3
                          M    0     0     0  NO. JOINT APPTS        0                                  M     0     0
                          D    0     0     0                                                            D     0     0

CSE PROGRAM               A    0     0     0    42    0    0    2   44 FACULTY    5    22  GRAD     50  A     0     0
IN DEPT OF NEC            B    1     1     1                            OTHER     0     4  UNDGR   101  B    22    21
                          M    1     1     1  NO. JOINT APPTS        3                                  M     9    15
                          D    1     1     1                                                            D     3     5

ISC PROGRAM               A    0     0     0     1    0    1   10    3 FACULTY    1     0  GRAD      0  A     0     0
IN DEPT OF BAD            B    0     1     1                            OTHER     0     0  UNDGR    20  B     0     5
                          M    0     0     0  NO. JOINT APPTS        0                                  M     0     0
                          D    0     0     0                                                            D     0     0

ISC PROGRAM               A    0     0     0    11    5    0   30   23 FACULTY    1     2  GRAD    316  A     0     0
IN DEPT OF NEC            B    0     0     0                            OTHER     0     0  UNDGR     0  B     0     0
                          M    1     1     1  NO. JOINT APPTS        0                                  M   122   130
                          D    0     0     0                                                            D     0     0

ISY PROGRAM               A    0     0     0     1    0    0    5    1 FACULTY    0     0  GRAD      0  A     0     0
IN DEPT OF ISY            B    1     1     1                            OTHER     0     0  UNDGR    37  B     3     4
                          M    0     0     0  NO. JOINT APPTS        1                                  M     0     0
                          D    0     0     0                                                            D     0     0

ISY PROGRAM               A    0     0     0     3    0    5    3    0 FACULTY    0     0  GRAD      0  A     0     0
IN DEPT OF NEC            B    0     0     0                            OTHER     0     0  UNDGR     0  B     0     0
                          M    1     1     1  NO. JOINT APPTS        0                                  M     0     0
                          D    1     1     1                                                            D     0     0

OTH PROGRAM               A    0     0     0     4    0    0    3    5 FACULTY    1     1  GRAD     20  A     0     0
IN DEPT OF CIS            B    0     0     1                            OTHER     0     0  UNDGR     0  B     0     0
                          M    0     0     1  NO. JOINT APPTS        0                                  M     0     0
                          D    0     0     0                                                            D     0     0

OTH PROGRAM               A    0     0     0     0    0    0    0    0 FACULTY    0     0  GRAD      0  A     0     0
IN DEPT OF NEC            B    0     0     1                            OTHER     0     0  UNDGR     0  B     0     0
                          M    0     0     0  NO. JOINT APPTS        0                                  M     0     0
                          D    0     0     0                                                            D     0     0

SIS PROGRAM               A    0     0     0     6    2   12   10    8 FACULTY    4     2  GRAD     25  A     0     0
IN DEPT OF SIS            B    1     1     1                            OTHER     0     0  UNDGR   100  B    30    35
                          M    1     1     1  NO. JOINT APPTS        2                                  M     3     3
                          D    1     1     1                                                            D     2     2
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                   CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                             SUMMARY BY DEGREE PROGRAMS
      GROUP (PRIVATE:DOCTORATE:10,000-19,999)
                                               (AS OF JUNE 30, 1977)

PROGRAM NAME             DEGREE LEVEL AND   *******            S T A F F        *******  MAJORS             DEGREES
  AND DEPARTMENT           YEAR OFFERED     FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED           AWARDED
                         76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE      COMP-SC OTHR  1976 - 1977        76-77 77-78

CSC PROGRAM            A    1     1     1    34   71   45   33   81 FACULTY    11   33  GRAD    288  A     1     5
IN DEPT OF CSC         B    4     4     4                           OTHER      10   22  UNDGR   380  B    84   100
                       M    3     3     3  NO. JOINT APPTS        19                                 M    60    67
                       D    2     2     2                                                            D    23    28

CSC PROGRAM            A    0     0     0    16    0    0    0   16 FACULTY     0   16  GRAD      0  A     0     0
IN DEPT OF MSC         B    1     1     1                           OTHER       0    0  UNDGR    40  B    12    15
                       M    0     0     0  NO. JOINT APPTS         0                                 M     0     0
                       D    0     0     0                                                            D     0     0

CSE PROGRAM            A    0     0     0     7    9    4    3   15 FACULTY     0    5  GRAD     29  A     0     0
IN DEPT OF CSC         B    1     1     1                           OTHER       0    0  UNDGR    55  B    22    34
                       M    1     1     1  NO. JOINT APPTS         1                                 M     4     5
                       D    1     1     1                                                            D     2     2

ISY PROGRAM            A    0     0     0    15    1    4    5   18 FACULTY     6   10  GRAD    102  A     0     0
IN DEPT OF EEN         B    1     1     1                           OTHER       2    0  UNDGR    47  B    16    15
                       M    1     1     1  NO. JOINT APPTS         5                                 M    37    40
                       D    1     1     1                                                            D     8     8

OTH PROGRAM            A    0     0     0    13    0   21    0   18 FACULTY     3   10  GRAD     42  A     0     0
IN DEPT OF MSC         B    1     1     1                           OTHER       0    0  UNDGR    65  B    15    12
                       M    1     1     1  NO. JOINT APPTS         8                                 M     9     5
                       D    1     1     1                                                            D     1     4

OTH PROGRAM            A    0     0     0     9    5    0    7   12 FACULTY     6    5  GRAD     98  A     0     0
IN DEPT OF NEC         B    1     1     1                           OTHER       0    0  UNDGR    10  B     0     0
                       M    1     1     1  NO. JOINT APPTS         2                                 M    17    20
                       D    0     0     0                                                            D     0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                   CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                             SUMMARY BY DEGREE PROGRAMS
      GROUP (PRIVATE:DOCTORATE:20,000 PLUS  )
                                               (AS OF JUNE 30, 1977)

PROGRAM NAME             DEGREE LEVEL AND   *******            S T A F F        *******  MAJORS             DEGREES
  AND DEPARTMENT           YEAR OFFERED     FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED           AWARDED
                         76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE      COMP-SC OTHR  1976 - 1977        76-77 77-78

CEN PROGRAM            A    0     0     0     6    0    4    0    0 FACULTY     0    8  GRAD     30  A     0     0
IN DEPT OF ENG         B    1     1     1                           OTHER       0    0  UNDGR   100  B    10    15
                       M    1     1     1  NO. JOINT APPTS         1                                 M     3    15
                       D    0     0     0                                                            D     0     0

CSC PROGRAM            A    0     0     0     7    2    4    8   14 FACULTY     5    0  GRAD    150  A     0     0
IN DEPT OF CSC         B    1     1     1                           OTHER       7    0  UNDGR   200  B    13    25
                       M    1     1     1  NO. JOINT APPTS         8                                 M    25    30
                       D    1     1     1                                                            D     2     4

CSC PROGRAM            A    0     0     0     5    2    8    0   10 FACULTY     5    0  GRAD     15  A     0     0
IN DEPT OF MAT         B    1     1     1                           OTHER       0    0  UNDGR    15  B     7    10
                       M    1     1     1  NO. JOINT APPTS         1                                 M     2     3
                       D    1     1     1                                                            D     0     2

OTH PROGRAM            A    0     0     0     3   17    1   29   21 FACULTY     0    7  GRAD     18  A     0     0
IN DEPT OF EEN         B    0     0     0                           OTHER       0    5  UNDGR    15  B     0     0
                       M    0     0     0  NO. JOINT APPTS         0                                 M     0     0
                       D    1     1     1                                                            D     5     4

OTH PROGRAM            A    0     0     0     0    0    0    6    4 FACULTY     0    0  GRAD      0  A     0     0
IN DEPT OF SCS         B    1     1     1                           OTHER       0    6  UNDGR     0  B     0     0
                       M    0     0     0  NO. JOINT APPTS         6                                 M     0     0
                       D    0     0     0                                                            D     0     0
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                                        SUMMARY BY DEGREE PROGRAMS
      GROUP I          :ASSOCIATE:               )
                                         (AS OF JUNE 30, 1977)

PROGRAM NAME            DEGREE LEVEL AND  *******          S T A F F      *******  MAJORS           DEGREES
   AND DEPARTMENT        YEAR OFFERED     FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED     AWARDED
                         76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE      COMP-SC OTHR  1976 - 1977  76-77 77-78

BAD PROGRAM             A     1     1     1    0    0    0    1    1 FACULTY    0    0  GRAD      0  A     0     0
IN DEPT OF BAD          B     0     0     0                          OTHER      0    0  UNDGR     0  B     0     0
                        M     0     0     0  NO. JOINT APPTS       0                                M     0     0
                        D     0     0     0                                                         D     0     0

CPR PROGRAM             A     4     5     5   12    0    3    1   14 FACULTY    0    1  GRAD      0  A    83    95
IN DEPT OF BAD          B     0     0     0                          OTHER      0    1  UNDGR   215  B     0     0
                        M     0     0     0  NO. JOINT APPTS       4                                M     0     0
                        D     0     0     0                                                         D     0     0

CPR PROGRAM             A     5     5     5   12    0    2   22   21 FACULTY    0    0  GRAD      0  A    77    98
IN DEPT OF BUS          B     0     0     0                          OTHER      0    0  UNDGR   734  B     0     0
                        M     0     0     0  NO. JOINT APPTS       0                                M     0     0
                        D     0     0     0                                                         D     0     0

CPR PROGRAM             A     1     1     1    2    0    0    2    3 FACULTY    0    0  GRAD      0  A    20    20
IN DEPT OF CIS          B     0     0     0                          OTHER      0    0  UNDGR    50  B     0     0
                        M     0     0     0  NO. JOINT APPTS       0                                M     0     0
                        D     0     0     0                                                         D     0     0

CPR PROGRAM             A     7     7     7    8    0    0    9   12 FACULTY    0    1  GRAD      0  A    80    93
IN DEPT OF CPR          B     0     0     0                          OTHER      0    0  UNDGR   487  B     0     0
                        M     0     0     0  NO. JOINT APPTS       0                                M     0     0
                        D     0     0     0                                                         D     0     0

CPR PROGRAM             A     1     1     1    1    0    0    3    2 FACULTY    0    0  GRAD      0  A    15    12
IN DEPT OF CSC          B     0     0     0                          OTHER      0    0  UNDGR    55  B     0     0
                        M     0     0     0  NO. JOINT APPTS       0                                M     0     0
                        D     0     0     0                                                         D     0     0

CPR PROGRAM             A    11    11    11   43    0   25   35   58 FACULTY    1    1  GRAD      0  A   263   302
IN DEPT OF DPR          B     0     0     0                          OTHER      0    0  UNDGR  2000  B     0     6
                        M     0     0     0  NO. JOINT APPTS       3                                M     0     0
                        D     0     0     0                                                         D     0     0

CPR PROGRAM             A     1     1     1    3    0    0    5    6 FACULTY    0    0  GRAD      0  A    30    35
IN DEPT OF ISY          B     0     0     0                          OTHER      0    0  UNDGR   125  B     0     0
                        M     0     0     0  NO. JOINT APPTS       0                                M     0     0
                        D     0     0     0                                                         D     0     0

CPR PROGRAM             A     1     1     1    0    0    0    1    1 FACULTY    0    0  GRAD      0  A     0     0
IN DEPT OF MAT          B     0     0     0                          OTHER      0    0  UNDGR     0  B     0     0
                        M     0     0     0  NO. JOINT APPTS       1                                M     0     0
                        D     0     0     0                                                         D     0     0

CSC PROGRAM             A     3     3     3    6    0    0    9    9 FACULTY    0    0  GRAD      0  A    44    48
IN DEPT OF BAD          B     0     0     0                          OTHER      0    0  UNDGR   115  B     0     0
                        M     0     0     0  NO. JOINT APPTS       1                                M     0     0
                        D     0     0     0                                                         D     0     0

CSC PROGRAM             A     1     1     1    1    0    0    0    1 FACULTY    0    0  GRAD      0  A     3     8
IN DEPT OF BUS          B     0     0     0                          OTHER      0    0  UNDGR    47  B     0     0
                        M     0     0     0  NO. JOINT APPTS       1                                M     0     0
                        D     0     0     0                                                         D     0     0

CSC PROGRAM             A     1     1     1    2    0    0    4    5 FACULTY    0    1  GRAD      0  A     0     0
IN DEPT OF CIS          B     0     0     0                          OTHER      0    0  UNDGR     0  B     0     0
                        M     0     0     0  NO. JOINT APPTS       2                                M     0     0
                        D     0     0     0                                                         D     0     0

CSC PROGRAM             A     2     2     2   14    0    5    0   17 FACULTY    0    6  GRAD      0  A    96   109
IN DEPT OF COM          B     0     0     0                          OTHER      0    0  UNDGR   327  B     0     0
                        M     0     0     0  NO. JOINT APPTS       0                                M     0     0
                        D     0     0     0                                                         D     0     0

CSC PROGRAM             A    15    15    16   43    2   15   43   62 FACULTY    0    2  GRAD      0  A   222   258
IN DEPT OF CSC          B     0     0     0                          OTHER      0    0  UNDGR  1398  B     0     0
                        M     0     0     0  NO. JOINT APPTS      12                                M     0     0
                        D     0     0     0                                                         D     0     0

CSC PROGRAM             A     1     1     1    3    0    0    2    3 FACULTY    0    0  GRAD      0  A    11    11
IN DEPT OF CTE          B     0     0     0                          OTHER      0    0  UNDGR    30  B     0     0
                        M     0     0     0  NO. JOINT APPTS       0                                M     0     0
                        D     0     0     0                                                         D     0     0

CSC PROGRAM             A     4     4     4   10    1    0    3   13 FACULTY    0    1  GRAD      0  A    67    60
IN DEPT OF DPR          B     0     0     0                          OTHER      1    0  UNDGR   201  B     0     0
                        M     0     0     0  NO. JOINT APPTS       2                                M     0     0
                        D     0     0     0                                                         D     0     0

CSC PROGRAM             A     3     3     3    2    0    0   13    5 FACULTY    0    0  GRAD      0  A     3     7
IN DEPT OF MAT          B     0     0     0                          OTHER      0    1  UNDGR    38  B     0     0
                        M     0     0     0  NO. JOINT APPTS       1                                M     0     0
                        D     0     0     0                                                         D     0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
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                         UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                               SUMMARY BY DEGREE PROGRAMS
     GROUP I          (ASSOCIATE)               ) CONTINUED
                                                   (AS OF JUNE 30, 1977)

 PROGRAM NAME           DEGREE LEVEL AND   *******          S T A F F       *******  MAJORS           DEGREES
   AND DEPARTMENT        YEAR OFFERED     FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED         AWARDED
                       76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE      COMP-SC OTHR  1976 - 1977      76-77 77-78

CSC PROGRAM          A    1     1     1     0    0    0    0    0 FACULTY    0    0 GRAD      0 A     0     2
IN DEPT OF MSC       B    0     0     0                           OTHER      0    0 UNDGR     4 B     0     0
                     M    0     0     0 NO. JOINT APPTS         0                               M     0     0
                     D    0     0     0                                                         D     0     0

CSC PROGRAM          A    1     1     1     3    0    1    0    3 FACULTY    0    0 GRAD      0 A    40    40
IN DEPT OF NEC       B    0     0     0                           OTHER      0    0 UNDGR    45 B     0     0
                     M    0     0     0 NO. JOINT APPTS         0                               M     0     0
                     D    0     0     0                                                         D     0     0

CSE PROGRAM          A    1     1     1     1    0    0    2    2 FACULTY    0    0 GRAD      0 A     5     5
IN DEPT OF CSE       B    0     0     0                           OTHER      0    2 UNDGR    15 B     0     0
                     M    0     0     0 NO. JOINT APPTS         1                               M     0     0
                     D    0     0     0                                                         D     0     0

CST PROGRAM          A    1     1     1     2    0    0    0    2 FACULTY    0    0 GRAD      0 A    20    21
IN DEPT OF CCS       B    0     0     0                           OTHER      0    0 UNDGR    67 B     0     0
                     M    0     0     0 NO. JOINT APPTS         0                               M     0     0
                     D    0     0     0                                                         D     0     0

CST PROGRAM          A    3     3     3     7    0    0    2    8 FACULTY    0    0 GRAD      0 A    20    45
IN DEPT OF CSC       B    0     0     0                           OTHER      0    0 UNDGR    73 B     0     0
                     M    0     0     0 NO. JOINT APPTS         0                               M     0     0
                     D    0     0     0                                                         D     0     0

CST PROGRAM          A    1     1     1     3    0    2    0    4 FACULTY    0    0 GRAD      0 A     7    15
IN DEPT OF EET       B    0     0     0                           OTHER      0    0 UNDGR    85 B     0     0
                     M    0     0     0 NO. JOINT APPTS         0                               M     0     0
                     D    0     0     0                                                         D     0     0

CTE PROGRAM          A    2     2     2     3    0    1    1    3 FACULTY    0    0 GRAD      0 A    10     4
IN DEPT OF CSC       B    0     0     0                           OTHER      0    0 UNDGR   128 B     0     0
                     M    0     0     0 NO. JOINT APPTS         0                               M     0     0
                     D    0     0     0                                                         D     0     0

CTE PROGRAM          A    5     5     5    10    0    2   20   18 FACULTY    0    0 GRAD      0 A    77   145
IN DEPT OF CTE       B    0     0     0                           OTHER      0    0 UNDGR   815 B     0     0
                     M    0     0     0 NO. JOINT APPTS         2                               M     0     0
                     D    0     0     0                                                         D     0     0

DPR PROGRAM          A   28    29    29    69    0   77   27  114 FACULTY    4    1 GRAD      0 A   475   634
IN DEPT OF BAD       B    0     0     0                           OTHER      1    0 UNDGR  3686 B     0     0
                     M    0     0     0 NO. JOINT APPTS        20                               M     0     0
                     D    0     0     0                                                         D     0     0

DPR PROGRAM          A   11    11    11    16    0   20   15   27 FACULTY    0    0 GRAD      0 A   105   180
IN DEPT OF BUS       B    0     0     0                           OTHER      0    0 UNDGR   800 B     0     0
                     M    0     0     0 NO. JOINT APPTS         2                               M     0     0
                     D    0     0     0                                                         D     0     0

DPR PROGRAM          A    1     1     2     3    0   16    0    8 FACULTY    0    0 GRAD      0 A    12    15
IN DEPT OF CIS       B    0     0     0                           OTHER      0    0 UNDGR   150 B     0     0
                     M    0     0     0 NO. JOINT APPTS         1                               M     0     0
                     D    0     0     0                                                         D     0     0

DPR PROGRAM          A    1     1     1     2    0    0    1    2 FACULTY    0    0 GRAD      0 A    15    20
IN DEPT OF COM       B    0     0     0                           OTHER      0    0 UNDGR    57 B     0     0
                     M    0     0     0 NO. JOINT APPTS         1                               M     0     0
                     D    0     0     0                                                         D     0     0

DPR PROGRAM          A    1     1     1     3    0    0    0    3 FACULTY    3    0 GRAD      0 A    25     0
IN DEPT OF CPR       B    0     0     0                           OTHER      0    0 UNDGR    70 B     0    80
                     M    0     0     0 NO. JOINT APPTS         0                               M     0     0
                     D    0     0     0                                                         D     0     0

DPR PROGRAM          A    6     6     6    23    1   43   34  154 FACULTY    0    1 GRAD      0 A   127   150
IN DEPT OF CSC       B    0     0     0                           OTHER      0    0 UNDGR  1141 B     0     0
                     M    0     0     0 NO. JOINT APPTS         0                               M     0     0
                     D    0     0     0                                                         D     0     0

DPR PROGRAM          A    1     1     1     1    0    0    4    2 FACULTY    0    0 GRAD      0 A     8    10
IN DEPT OF CTE       B    0     0     0                           OTHER      0    0 UNDGR    45 B     0     0
                     M    0     0     0 NO. JOINT APPTS         1                               M     0     0
                     D    0     0     0                                                         D     0     0

DPR PROGRAM          A  103   105   105   297   18   76  324  450 FACULTY    2   10 GRAD      2 A  2023  2347
IN DEPT OF DPR       B    0     0     0                           OTHER      3    0 UNDGR 11738 B     0     0
                     M    0     0     0 NO. JOINT APPTS        48                               M     0     0
                     D    0     0     0                                                         D     3     0

DPR PROGRAM          A    1     1     1     2    0    0    4    3 FACULTY    0    0 GRAD      0 A     0    20
IN DEPT OF ISY       B    0     0     0                           OTHER      0    0 UNDGR   135 B     0     0
                     M    0     0     0 NO. JOINT APPTS         0                               M     0     0
                     D    0     0     0                                                         D     0     0
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                                                   SUMMARY BY CEGREE PRCGRAMS
         GROUP (        (ASSOCIATE)            ) CONTINUED
                                                      (AS OF JUNE 30, 1977)

PROGRAM NAME           DEGREE LEVEL AND    *******           S T A F F       *******   MAJORS             DEGREES
   AND DEPARTMENT        YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED           AWARDED
                        76-77 77-78 78-79  TIME RA-S TA-S CTHR  FTE        COMP-SC OTHR  1976 - 1977        76-77 77-78

DPR PROGRAM            A   1     1     1    25    0    0    5   26 FACULTY    5     0  GRAD      0  A     0     0
IN DEPT CF MAT         B   0     0     0                         OTHER      0     0  UNDGR     0  B     0     0
                       M   0     0     0   NO. JCINT APPTS       0                                   M     0     0
                       D   0     0     0                                                             D     0     0

DPR PROGRAM            A   3     3     3     8    0    0   54  109 FACULTY    0     0  GRAD      0  A    69    98
IN DEPT OF NEC         B   0     0     0                         CTHER      1     0  UNDGR   604  B     0     0
                       M   0     0     0   NO. JOINT APPTS       2                                   M     0     0
                       D   0     0     0                                                             D     0     0

DPR PRCGRAM            A   1     1     1     0    0    0    0    0 FACULTY    0     0  GRAD      0  A     0     0
IN DEPT OF SYS         B   0     0     0                         OTHER      0     0  UNDGR     0  B     0     0
                       M   0     0     0   NO. JOINT APPTS       0                                   M     0     0
                       D   0     0     0                                                             D     0     0

EDP PROGRAM            A   1     1     1     1    0    0    6    3 FACULTY    0     0  GRAD      0  A     0     0
IN DEPT OF DPR         B   0     0     0                         CTHER      0     0  UNDGR    15  B     0     0
                       M   0     0     0   NO. JOINT APPTS       0                                   M     0     0
                       D   0     0     0                                                             D     0     0

ICS PROGRAM            A   1     1     1     4    0    0    0    4 FACULTY    0     0  GRAD      0  A    16    20
IN DEPT OF CIS         B   0     0     0                         OTHER      0     0  UNDGR    36  B     0     0
                       M   0     0     0   NO. JCINT APPTS       0                                   M     0     0
                       D   0     0     0                                                             D     0     0

IPR PROGRAM            A   1     1     1    11    0    0    0   11 FACULTY    0     0  GRAD      0  A    19    19
IN DEPT OF IPR         B   0     0     0                         CTHER      0     0  UNDGR   245  B     0     0
                       M   0     0     0   NO. JOINT APPTS       0                                   M     0     0
                       D   0     0     0                                                             D     0     0

ISY PROGRAM            A   1     1     1     6    0    0   15   12 FACULTY    0     0  GRAD      0  A    65    72
IN DEPT OF ISY         B   0     0     0                         OTHER      0     0  UNDGR   358  B     0     0
                       M   0     0     0   NO. JOINT APPTS       3                                   M     0     0
                       D   0     0     0                                                             D     0     0

OTH PROGRAM            A   4     4     4     7    0    0    1   37 FACULTY    0     0  GRAD      0  A     2    10
IN DEPT OF BAD         B   0     0     0                         CTHER      0     0  UNDGR   226  B     0     0
                       M   0     0     0   NO. JOINT APPTS       0                                   M     0     0
                       D   0     0     0                                                             D     0     0

OTH PROGRAM            A   1     1     1     1    0    0    1    1 FACULTY    0     0  GRAD      0  A    13    13
IN DEPT OF CTE         B   0     0     0                         OTHER      0     0  UNDGR    49  B     0     0
                       M   0     0     0   NO. JCINT APPTS       1                                   M     0     0
                       D   0     0     0                                                             D     0     0

OTH PROGRAM            A   3     3     3     5    0    9    1   10 FACULTY    0     0  GRAD      0  A    50    50
IN DEPT OF CPR         B   0     0     0                         CTHER      1     0  UNDGR   239  B     0     0
                       M   0     0     0   NO. JOINT APPTS       0                                   M     0     0
                       D   0     0     0                                                             D     0     0

OTH PRCGRAM            A   1     1     1    10    0    0    4   14 FACULTY    0     0  GRAD      0  A     0     0
IN DEPT OF EET         B   0     0     0                         OTHER      0     0  UNDGR     0  B     0     0
                       M   0     0     0   NO. JOINT APPTS       0                                   M     0     0
                       D   0     0     0                                                             D     0     0

OTH PROGRAM            A   1     1     1     1    0    3    0    2 FACULTY    0     1  GRAD      0  A     0     0
IN DEPT OF MAT         B   0     0     0                         CTHER      0     0  UNDGR     0  B     0     0
                       M   0     0     0   NO. JOINT APPTS       0                                   M     0     0
                       D   0     0     0                                                             D     0     0

OTH PROGRAM            A   1     1     1     2    0    0   12    5 FACULTY    1     0  GRAD      0  A    20    25
IN DEPT OF NEC         B   0     0     0                         OTHER      1     0  UNDGR   198  B     0     0
                       M   0     0     0   NO. JOINT APPTS       0                                   M     0     0
                       D   0     0     0                                                             D     0     0
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                                              SUMMARY BY CEGREE PROGRAMS
        GRCUP I      (BACHELCRS)              )
                                                (AS OF JUNE 30, 1977)

  PROGRAM NAME             DEGREE LEVEL AND    *******          S T A F F        *******  MAJORS           DEGREES
     AND DEPARTMENT          YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED         AWARDED
                           76-77 77-78 78-79   TIME RA-S TA-S OTHR  FTE        COMP-SC OTHR 1976 - 1977     76-77 77-78

 CPR PROGRAM               A   1     1     1     0    0    0    0    0 FACULTY    0    2  GRAD     0  A     2     2
 IN DEPT OF BAD            B   0     0     0                            CTHER      0.   0  UNDGR    4  B     0     0
                           M   0     0     0   NO. JOINT APPTS        5                                 M     0     0
                           D   0     0     0                                                            D     0     0

 CPR PRCGRAM               A   1     1     1     3    0    0    3    4 FACULTY    0    0  GRAD     0  A     8    12
 IN DEPT OF CPR            B   1     1     1                            OTHER      0    0  UNDGR   70  B     9    12
                           M   0     0     0   NO. JOINT APPTS        0                                 M     0     0
                           D   0     0     0                                                            D     0     0

 CPR PROGRAM               A   1     1     1     1    0    0    0    1 FACULTY    0    0  GRAD     0  A     1     2
 IN DEPT OF MAT            B   0     0     0                            CTHER      0    0  UNDGR    6  B     0     0
                           M   0     0     0   NO. JOINT APPTS        0                                 M     0     0
                           D   0     0     0                                                            D     0     0

 CSC PROGRAM               A   4     4     4     3    0    3    5    6 FACULTY    0    4  GRAD     0  A    15    18
 IN DEPT OF BAD            B   1     1     1                            CTHER      0    0  UNDGR   65  B     2     2
                           M   0     0     0   NO. JCINT APPTS        4                                 M     0     0
                           D   0     0     0                                                            D     0     0

 CSC PROGRAM               A   1     1     1     1    0    0    1    2 FACULTY    1    0  GRAD     0  A    10    10
 IN DEPT OF COM            B   1     1     1                            CTHER      0    0  UNDGR   40  B     3     3
                           M   0     0     0   NO. JOINT APPTS        0                                 M     C     0
                           D   0     0     0                                                            D     0     0

 CSC PROGRAM               A   6     6     6    19    1   17   28   34 FACULTY    7   17  GRAD     6  A    37    50
 IN DEPT OF CSC            B   7    10    10                            OTHER      0    1  UNDGR  541  B    62   100
                           M   0     0     0   NO. JOINT APPTS       20                                 M     0     0
                           D   0     0     0                                                            D     0     0

 CSC PROGRAM               A   1     1     1     1    0    0    4    4 FACULTY    0    0  GRAD     0  A    20    20
 IN DEPT OF CPR            B   0     0     0                            CTHER      0    0  UNDGR   75  B     0     0
                           M   0     0     0   NO. JOINT APPTS        0                                 M     0     0
                           D   0     0     0                                                            D     0     0

 CSC PROGRAM               A   2     2     2    14    1    1   13   20 FACULTY    3   13  GRAD     0  A     3     8
 IN DEPT OF MAT            B   7     8     8                            OTHER      0    0  UNDGR   57  B    16    13
                           M   0     0     0   NO. JOINT APPTS       14                                 M     0     0
                           D   0     0     0                                                            D     0     0

 CSC PROGRAM               A   0     0     0     7    1    1    3    8 FACULTY    1    4  GRAD     0  A     0     0
 IN DEPT OF MSC            B   3     3     3                            OTHER      0    0  UNDGR   54  B    11    17
                           M   0     0     0   NO. JOINT APPTS        4                                 M     0     0
                           D   0     0     0                                                            D     0     0

 CSC PRCGRAM               A   0     0     0     0    0    0    4    2 FACULTY    1    1  GRAD     0  A     0     0
 IN DEPT OF NEC            B   1     1     1                            OTHER      0    0  UNDGR   21  B     7     3
                           M   0     0     0   NO. JOINT APPTS        4                                 M     0     0
                           D   0     0     0                                                            D     0     0

 CST PROGRAM               A   1     1     1     6    0    0    0    6 FACULTY    0    0  GRAD     0  A    23    26
 IN DEPT OF COM            B   1     1     1                            OTHER      0    0  UNDGR   97  B    10    18
                           M   0     9     0   NO. JCINT APPTS        0                                 M     0     0
                           D   0     0     0                                                            D     0     0

 CST PROGRAM               A   1     1     1     2    0    0    0    2 FACULTY    0    0  GRAD     0  A    10    12
 IN DEPT OF EET            B   0     0     0                            CTHER      0    0  UNDGR   25  B     0     0
                           M   0     0     0   NO. JOINT APPTS        0                                 M     0     0
                           D   0     0     0                                                            D     0     0

 DPR PROGRAM               A   1     1     1     3    0    1    2    4 FACULTY    0    0  GRAD     0  A    10     8
 IN DEPT OF BAD            B   3     3     3                            OTHER      0    0  UNDGR  149  B    45    52
                           M   0     0     0   NO. JOINT APPTS        0                                 M     0     0
                           D   0     0     0                                                            D     0     0

 DPR PROGRAM               A   1     1     1     3    0    0    0    3 FACULTY    0    0  GRAD     0  A     2     2
 IN DEPT OF BUS            B   0     0     0                            CTHER      0    0  UNDGR    6  B     0     0
                           M   0     0     0   NO. JOINT APPTS        3                                 M     0     0
                           D   0     0     0                                                            D     0     0

 DPR PROGRAM               A   5     5     5    10    0    4   14   17 FACULTY    0    1  GRAD     0  A    16    35
 IN DEPT OF DPR            B   3     3     3                            OTHER      0    0  UNDGR  312  B    26    40
                           M   0     0     0   NO. JOINT APPTS        6                                 M     0     0
                           D   0     0     0                                                            D     0     0

 DPR PROGRAM               A   1     1     1     4    0    0    0    4 FACULTY    0    0  GRAD     0  A    12    10
 IN DEPT OF NEC            B   0     0     0                            OTHER      1    0  UNDGR   55  B     0     0
                           M   0     0     0   NO. JOINT APPTS        0                                 M     0     0
                           D   0     0     0                                                            D     0     0

 ISC PROGRAM               A   0     0     0     8    8    0    0   10 FACULTY    0    0  GRAD     0  A     0     0
 IN DEPT OF BAD            B   1     1     1                            OTHER      0    0  UNDGP   75  B    33    40
                           M   0     0     0   NO. JOINT APPTS        0                                 M     0     0
                           D   0     0     0                                                            D     0     0
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                                                   SUMMARY BY DEGREE PROGRAMS
        GROUP I          (BACHELORS)            ) CONTINUED
                                                     (AS OF JUNE 30, 1977)

PROGRAM NAME              DEGREE LEVEL AND     *******          S T A F F      *******  MAJORS          DEGREES
   AND DEPARTMENT          YEAR OFFERED        FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED        AWARDED
                         76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE         COMP-SC OTHR  1976 - 1977    76-77 77-78

ISC PROGRAM               A   0     0     0    3    0    0    0    3 FACULTY    1      0  GRAD      0  A    0     0
IN DEPT OF CSC            B   1     1     1                          OTHER      0      0  UNDGR     0  B    0     0
                          M   0     0     0 NO. JOINT APPTS        0                                   M    0     0
                          D   0     0     0                                                            D    0     0

ISC PROGRAM               A   1     1     1    1    0    3    1    2 FACULTY    0      1  GRAD      0  A    0     0
IN DEPT OF ISC            B   1     1     1                          OTHER      0      0  UNDGR     4  B    0     1
                          M   0     0     0 NO. JOINT APPTS        1                                   M    0     0
                          D   0     0     0                                                            D    0     0

ISY PROGRAM               A   0     0     0    2    0    0    3    4 FACULTY    0      0  GRAD      0  A    0     0
IN DEPT OF BAD            B   1     1     1                          OTHER      0      0  UNDGR    38  B   64    12
                          M   0     0     0 NO. JOINT APPTS        0                                   M    0     0
                          D   0     0     0                                                            D    0     0

ISY PROGRAM               A   1     1     1    2    0    0    4    3 FACULTY    0      0  GRAD      0  A    2     2
IN DEPT OF ISY            B   1     1     1                          OTHER      0      0  UNDGR    70  B   18    15
                          M   0     0     0 NO. JOINT APPTS        0                                   M    0     0
                          D   0     0     0                                                            D    0     0

MSC PROGRAM               A   0     0     0   12    0    0    0   12 FACULTY    0      0  GRAD      0  A    0     0
IN DEPT OF CSC            B   1     1     1                          OTHER      2      0  UNDGR   100  B   21    19
                          M   0     0     0 NO. JOINT APPTS        0                                   M    0     0
                          D   0     0     0                                                            D    0     0

OTH PROGRAM               A   0     0     0    1    0    0    1    2 FACULTY    0      0  GRAD      0  A    6    15
IN DEPT OF BAC            B   1     1     1                          OTHER      0      0  UNDGR    93  B    8    13
                          M   0     0     0 NO. JOINT APPTS        0                                   M    0     0
                          D   0     0     0                                                            D    0     0

OTH PROGRAM               A   1     1     0    8    0    0    0    8 FACULTY    0      0  GRAD      0  A   31    40
IN DEPT OF CIS            B   0     0     1                          OTHER      0      0  UNDGR   320  B    0     0
                          M   0     0     0 NO. JOINT APPTS        0                                   M    0     0
                          D   0     0     0                                                            D    0     0

OTH PROGRAM               A   0     0     0    2    0    0    2    3 FACULTY    0      1  GRAD      0  A    0     0
IN DEPT OF COM            B   1     1     1                          OTHER      0      0  UNDGR     0  B    0     4
                          M   0     0     0 NO. JOINT APPTS        0                                   M    0     0
                          D   0     0     0                                                            D    0     0

OTH PROGRAM               A   1     1     1    4    0    0    2    5 FACULTY    0      3  GRAD      0  A    0     2
IN DEPT OF CSC            B   1     1     1                          OTHER      0      0  UNDGR     3  B    0     0
                          M   0     0     0 NO. JOINT APPTS        0                                   M    0     0
                          D   0     0     0                                                            D    0     0

OTH PROGRAM               A   0     0     0   19    0    4    2   21 FACULTY    0     12  GRAD      0  A    0     0
IN DEPT OF MAT            B   4     4     5                          OTHER      0      2  UNDGR    52  B   14    25
                          M   0     0     0 NO. JOINT APPTS        1                                   M    0     0
                          D   0     0     0                                                            D    0     0

OTH PROGRAM               A   0     0     0    4    0    0    0    4 FACULTY    0      2  GRAD      0  A    0     0
IN DEPT OF MSC            B   1     1     1                          OTHER      0      0  UNDGR    17  B    5     5
                          M   0     0     0 NO. JOINT APPTS        0                                   M    0     0
                          D   0     0     0                                                            D    0     0

OTH PROGRAM               A   0     0     0    0    0    0    0    0 FACULTY    0      0  GRAD      0  A    0     0
IN DEPT OF NEC            B   1     1     1                          OTHER      0      0  UNDGR     0  B    0     0
                          M   0     0     0 NO. JOINT APPTS        0                                   M    0     0
                          D   0     0     0                                                            D    0     0
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                                                       SUMMARY BY DEGREE PROGRAMS
        GROUP (         ;MASTERS  :              )
                                                         (AS OF JUNE 30, 1977)

 PROGRAM NAME              DEGREE LEVEL AND     *******         S T A F F          *******  MAJORS            DEGREES
    AND DEPARTMENT           YEAR OFFERED       FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED          AWARDED
                             76-77 77-78 78-79  TIME RA-S TA-S CTHR  FTE        COMP-SC OTHR  1976 - 1977       76-77 77-78

CEN PROGRAM                A    1     1     1      0    0    0    4    1 FACULTY    0    1  GRAD      0  A     8     8
IN DEPT OF BAD             B    0     0     0                            OTHER      0    0  UNDGR    16  B     0     0
                           M    0     0     0   NO. JOINT APPTS        4                                 M     0     0
                           D    0     0     0                                                            D     0     0

CEN PROGRAM                A    0     0     0      6    1    4    2    8 FACULTY    3    3  GRAD     40  A     0     0
IN DEPT OF EEN             B    1     1     1                            OTHER      0    0  UNDGR    10  B    12    15
                           M    2     2     2   NO. JOINT APPTS        0                                 M    15    17
                           D    0     0     0                                                            D     0     0

CIS PROGRAM                A    0     0     0      6    0    0    0    6 FACULTY    1    0  GRAD      0  A     0     0
IN DEPT OF BUS             B    1     1     1                            OTHER      0    2  UNDGR    25  B     0     0
                           M    0     0     0   NO. JOINT APPTS        0                                 M     0     0
                           D    0     0     0                                                            D     0     0

CIS PROGRAM                A    2     2     2      4    0    2    0    4 FACULTY    1    0  GRAD      0  A     0    10
IN DEPT OF CIS             B    2     2     2                            OTHER      0    0  UNDGR    75  B     6    20
                           M    0     0     0   NO. JOINT APPTS        0                                 M     0     0
                           D    0     0     0                                                            D     0     0

CPR PROGRAM                A    1     1     1      0    0    0    5    2 FACULTY    1    1  GRAD      0  A    12    20
IN DEPT OF CIS             B    0     0     0                            OTHER      0    0  UNDGR    82  B     0     0
                           M    0     0     0   NO. JOINT APPTS        0                                 M     0     0
                           D    0     0     0                                                            D     0     0

CPR PROGRAM                A    1     1     1      6    0    1   18   10 FACULTY    0    1  GRAD      0  A     0     0
IN DEPT OF ISY             B    1     1     1                            OTHER      0    0  UNDGR   205  B    12    11
                           M    0     0     0   NO. JOINT APPTS        0                                 M     0     0
                           D    0     0     0                                                            D     0     0

CPR PROGRAM                A    0     0     0      2    0    0    0    2 FACULTY    0    2  GRAD      0  A     0     0
IN DEPT OF MAT             B    1     1     1                            OTHER      0    0  UNDGR    10  B     0     5
                           M    0     0     0   NO. JOINT APPTS        2                                 M     0     0
                           D    0     0     0                                                            D     0     0

CSC PROGRAM                A    0     0     0      2    0    0    2    3 FACULTY    0    0  GRAD      0  A     0     0
IN DEPT OF BUS             B    1     2     2                            OTHER      0    0  UNDGR    14  B     3     4
                           M    0     0     0   NO. JOINT APPTS        0                                 M     0     0
                           D    0     0     0                                                            D     0     0

CSC PROGRAM                A    1     1     1      1    0    0    0    1 FACULTY    0    0  GRAD      0  A     0     0
IN DEPT OF CCS             B    0     0     0                            OTHER      0    0  UNDGR     0  B     0     0
                           M    0     0     0   NO. JOINT APPTS        0                                 M     0     0
                           D    0     0     0                                                            D     0     0

CSC PROGRAM                A    0     0     0     14    2    7   14   23 FACULTY    5    5  GRAD     31  A     8     0
IN DEPT OF CIS             B    5     6     6                            OTHER      1    0  UNDGR   313  B    63    56
                           M    1     1     1   NO. JOINT APPTS        5                                 M     1     4
                           D    0     0     0                                                            D     0     0

CSC PROGRAM                A    0     0     0     15    0    1   17   18 FACULTY    0    8  GRAD    124  A     0     0
IN DEPT OF COM             B    2     2     2                            OTHER      0   11  UNDGR   350  B    71    90
                           M    1     1     1   NO. JOINT APPTS        7                                 M     3    10
                           D    0     0     0                                                            D     0     0

CSC PROGRAM                A    9     9     9    178   17   56  124  332 FACULTY   64   81  GRAD    580  A    57    76
IN DEPT OF CSC             B   41    42    44                            OTHER      7   17  UNDGR  4844  B   745   927
                           M   10    11    12   NO. JOINT APPTS       58                                 M    99   121
                           D    1     1     1                                                            D     0     1

CSC PROGRAM                A    0     0     0      4    0    0    0    4 FACULTY    1    2  GRAD      0  A     0     0
IN DEPT OF ICS             B    1     1     1                            OTHER      0    0  UNDGR    33  B     5     7
                           M    0     0     0   NO. JOINT APPTS        0                                 M     0     0
                           D    0     0     0                                                            D     0     0

CSC PROGRAM                A    5     5     5     29    2    3   26   42 FACULTY    7   21  GRAD      0  A     5    26
IN DEPT OF MAT             B   11    12    12                            OTHER      1    2  UNDGR   546  B    61    84
                           M    0     0     0   NO. JOINT APPTS        7                                 M     0     0
                           D    0     0     0                                                            D     0     0

CSC PROGRAM                A    0     0     0      5    0    0    1    5 FACULTY    2    3  GRAD      0  A     0     0
IN DEPT OF MCS             B    1     1     1                            OTHER      0    0  UNDGR   100  B    20    20
                           M    0     0     0   NO. JOINT APPTS        0                                 M     0     0
                           D    0     0     0                                                            D     0     0

CSC PROGRAM                A    1     1     1     40    0    2   24  212 FACULTY   10   25  GRAD      0  A     5     5
IN DEPT OF MSC             B    9     9     9                            OTHER      0    1  UNDGR   981  B   120   151
                           M    0     1     1   NO. JOINT APPTS        9                                 M     0     0
                           D    0     0     0                                                            D     0     0

CSC PROGRAM                A    0     0     0     11    0    0   15   19 FACULTY    3   11  GRAD      0  A     0     0
IN DEPT OF NEC             B    3     4     4                            OTHER      0    0  UNDGR   199  B    19    38
                           M    0     0     0   NO. JOINT APPTS       10                                 M     0     0
                           D    0     0     0                                                            D     0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                   CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                           UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                   SUMMARY BY DEGREE PROGRAMS
      GROUP (        :MASTERS  :              ) CONTINUED
                                                      (AS OF JUNE 30, 1977)

PROGRAM NAME              DEGREE LEVEL AND     *******          S T A F F       *******  MAJORS            DEGREES
  AND DEPARTMENT           YEAR OFFERED        FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED          AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE        COMP-SC CTHR  1976 - 1977      76-77 77-78

CSC PROGRAM               A   0     0     0    22    0    6    2   24 FACULTY     8   12 GRAD     35 A     0     0
IN DEPT OF SCS            B   1     1     1                           OTHER       0    0 UNDGR   305 B    50    55
                          M   1     1     1 NO. JOINT APPTS           0                                M    12    16
                          D   0     0     0                                                            D     0     0

CSE PROGRAM               A   0     0     0    20    0    0   14   27 FACULTY     0    0 GRAD     30 A     0     0
IN DEPT OF EEN            B   1     1     1                           OTHER       0    0 UNDGR    90 B    22    40
                          M   1     1     1 NO. JOINT APPTS           0                                M     9    20
                          D   0     0     0                                                            D     0     0

CST PROGRAM               A   0     0     0    10    5    4    0   22 FACULTY     1    3 GRAD     40 A     0     0
IN DEPT OF IEN            B   1     1     1                           OTHER       8    0 UNDGR    37 B     5    37
                          M   1     1     1 NO. JOINT APPTS           3                                M    15    40
                          D   0     0     0                                                            D     0     0

CST PROGRAM               A   1     1     1     1    0    0    7    3 FACULTY     0    3 GRAD      0 A     0    16
IN DEPT OF MAT            B   0     0     0                           OTHER       0    0 UNDGR    24 B     0     0
                          M   0     0     0 NO. JOINT APPTS           2                                M     0     0
                          D   0     0     0                                                            D     0     0

CTE PROGRAM               A   1     1     1     0    0    6    0    3 FACULTY     0    0 GRAD      0 A     2     4
IN DEPT OF BAD            B   0     0     0                           OTHER       0    0 UNDGR    10 B     0     0
                          M   0     0     0 NO. JOINT APPTS           2                                M     0     0
                          D   0     0     0                                                            D     0     0

CTE PROGRAM               A   1     1     1     6    0    3   10   15 FACULTY     0    2 GRAD      0 A    39    37
IN DEPT OF CTE            B   1     1     1                           OTHER       0    2 UNDGR   620 B     9     7
                          M   0     0     0 NO. JOINT APPTS           0                                M     0     0
                          D   0     0     0                                                            D     0     0

DPR PROGRAM               A   5     5     5    23    1    6   24   34 FACULTY     3    7 GRAD      0 A    28    48
IN DEPT OF BAD            B   9     9     9                           OTHER       0    3 UNDGR   851 B   103   130
                          M   0     0     0 NO. JOINT APPTS           2                                M     0     0
                          D   0     0     0                                                            D     0     0

DPR PROGRAM               A   1     1     1    10    0    0   13   13 FACULTY     0    4 GRAD      7 A     1     5
IN DEPT OF BUS            B   3     3     3                           OTHER       0    4 UNDGR   243 B    25    39
                          M   1     1     1 NO. JOINT APPTS           3                                M     0     1
                          D   0     0     0                                                            D     0     0

DPR PROGRAM               A   1     1     1     1    0    0    0    1 FACULTY     0    0 GRAD      0 A     2    11
IN DEPT OF COM            B   0     0     0                           OTHER       0    0 UNDGR    51 B     0     0
                          M   0     0     0 NO. JOINT APPTS           0                                M     0     0
                          D   0     0     0                                                            D     0     0

DPR PROGRAM               A   0     0     0     1    0    0    1    1 FACULTY     1    0 GRAD      0 A     0     0
IN DEPT OF CSC            B   1     1     1                           OTHER       0    0 UNDGR    70 B    25    30
                          M   0     0     0 NO. JOINT APPTS           0                                M     0     0
                          D   0     0     0                                                            D     0     0

DPR PROGRAM               A   1     1     1    29 [illegible] [illegible] 10   24 FACULTY     0    1 GRAD      0 A     9    12
IN DEPT OF DPR            B   4     4     4                           OTHER       0    8 UNDGR   736 B   112   148
                          M   0     0     0 NO. JOINT APPTS           0                                M     0     0
                          D   0     0     0                                                            D     0     0

DPR PROGRAM               A   2     3     3     3    0    0   12    8 FACULTY     0    0 GRAD      0 A    22    29
IN DEPT OF NEC            B   0     0     0                           OTHER       0    0 UNDGR   206 B     0     0
                          M   0     0     0 NO. JOINT APPTS          12                                M     0     0
                          D   0     0     0                                                            D     0     0

ICS PROGRAM               A   1     1     1     6    0    0   11    9 FACULTY     1    5 GRAD      0 A     2     5
IN DEPT OF ICS            B   2     2     2                           OTHER       0    0 UNDGR   257 B    45    51
                          M   0     0     0 NO. JOINT APPTS           2                                M     0     0
                          D   0     0     0                                                            D     0     0

IPR PROGRAM               A   0     0     0     3    0    0    1    5 FACULTY     0    0 GRAD      0 A     0     0
IN DEPT OF CIS            B   1     1     1                           OTHER       0    1 UNDGR    90 B     5    15
                          M   0     0     0 NO. JOINT APPTS           0                                M     0     0
                          D   0     0     0                                                            D     0     0

ISC PROGRAM               A   0     0     0     5    0    0    5    8 FACULTY     1    5 GRAD      0 A     0     0
IN DEPT OF BAD            B   1     2     2                           OTHER       0    0 UNDGR    64 B     7     7
                          M   0     0     0 NO. JOINT APPTS           2                                M     0     0
                          D   0     0     0                                                            D     0     0

ISC,PROGRAM               A   0     0     0     3    0    1    0    3 FACULTY     0    1 GRAD      0 A     0     0
IN DEPT OF CSC            B   1     1     1                           OTHER       0    0 UNDGR    55 B     9     7
                          M   0     0     0 NO. JOINT APPTS           0                                M     0     0
                          D   0     0     0                                                            D     0     0

ISC PROGRAM               A   0     0     0     3    0    0    1    3 FACULTY     2    1 GRAD      0 A     0     0
IN DEPT OF ISY            B   1     1     1                           OTHER       0    0 UNDGR    39 B     9     9
                          M   0     0     0 NO. JOINT APPTS           1                                M     0     0
                          D   0     0     0                                                            D     0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

SUMMARY BY DEGREE PROGRAMS

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     GROUP (       ;MASTERS  )            ) CONTINUED
                                              (AS OF JUNE 30, 1977)

  PROGRAM NAME            DEGREE LEVEL AND   *******        S T A F F        *******  MAJORS           DEGREES
    AND DEPARTMENT          YEAR CFFERED     FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED        AWARDED
                          76-77 77-78 78-79  TIME RA-S TA-S OTHR  FTE      COMP-SC OTHR   1976 - 1977     76-77 77-78

ISC PROGRAM               A    0     0     0    1    0    0    0    1 FACULTY    0    1  GRAD       0  A     0     0
IN DEPT OF MAT            B    1     1     1                          OTHER      0    0  UNDGR      0  B     0     0
                          M    0     0     0 NO. JOINT APPTS          1                                 M     0     0
                          D    0     0     0                                                            D     0     0

ISY PROGRAM               A    0     0     0    8    0    0    4   10 FACULTY    1    7  GRAD      89  A     0     0
IN DEPT OF BAD            B    2     2     2                          CTHER      0    0  UNDGR     46  B     8    24
                          M    1     1     1 NO. JOINT APPTS          2                                 M    10    11
                          D    0     0     0                                                            D     0     0

ISY PROGRAM               A    0     0     0    3    0    2    2    5 FACULTY    1    0  GRAD       0  A     0     0
IN DEPT OF BUS            B    1     1     1                          CTHER      0    0  UNDGR     13  B     0     4
                          M    0     0     0 NO. JOINT APPTS          0                                 M     0     0
                          D    0     0     0                                                            D     0     0

ISY PROGRAM               A    0     0     0    8    0    0    2    8 FACULTY    2    0  GRAD       0  A     0     0
IN DEPT OF CIS            B    1     1     1                          CTHER      0    0  UNDGR    125  B    25    25
                          M    0     0     0 NO. JOINT APPTS          0                                 M     0     0
                          D    0     0     0                                                            D     0     0

ISY PROGRAM               A    1     1     1    4    0    0    0    4 FACULTY    1    2  GRAD       0  A     1     0
IN DEPT OF ICS            B    1     1     1                          OTHER      0    0  UNDGR     66  B    15    21
                          M    0     0     0 NO. JOINT APPTS          0                                 M     0     0
                          D    0     0     0                                                            D     0     0

ISY PROGRAM               A    2     2     2   14    0    0   11   19 FACULTY    4    4  GRAD       0  A     5    10
IN DEPT OF ISY            B    4     4     4                          CTHER      0    3  UNDGR    460  B    57    91
                          M    0     0     1 NO. JOINT APPTS          1                                 M     0     0
                          D    0     0     0                                                            D     0     0

ISY PROGRAM               A    0     0     0    7    0    0    0    7 FACULTY    0    5  GRAD       0  A     0     0
IN DEPT OF NEC            B    1     1     1                          CTHER      0    0  UNDGR    160  B    35    40
                          M    0     0     0 NC. JCINT APPTS          0                                 M     0     0
                          D    0     0     0                                                            D     0     0

NEC PROGRAM               A    0     0     0    6    0    2    2    8 FACULTY    0    0  GRAD      62  A     0     0
IN DEPT OF NEC            B    0     0     0                          OTHER      0    0  UNDGR      0  B     0     0
                          M    1     1     1 NO. JOINT APPTS          0                                 M    31    20
                          D    0     0     0                                                            D     0     0

OTH PROGRAM               A    0     0     0    2    0    1    0    2 FACULTY    1    1  GRAD       0  A     0     0
IN DEPT OF BAD            B    1     1     1                          OTHER      0    2  UNDGR      8  B     0     1
                          M    0     0     0 NO. JOINT APPTS          2                                 M     0     0
                          D    0     0     0                                                            D     0     0

OTH PROGRAM               A    0     0     0    4    0    0    1    5 FACULTY    0    4  GRAD       0  A     0     0
IN DEPT OF CIS            B    1     1     1                          CTHER      0    0  UNDGR      0  B     0     0
                          M    0     0     0 NO. JOINT APPTS          2                                 M     0     0
                          D    0     0     0                                                            D     0     0

OTH PROGRAM               A    0     0     0    8    0    0    2    9 FACULTY    0    3  GRAD       0  A     0     0
IN DEPT CF COM            B    2     3     3                          OTHER      0    0  UNDGR     80  B     5    23
                          M    0     0     0 NO. JCINT APPTS          4                                 M     0     0
                          D    0     0     0                                                            D     0     0

OTH PROGRAM               A    0     0     0    2    0    4    0    1 FACULTY    0    1  GRAD       0  A     0     0
IN DEPT OF ENG            B    0     1     1                          OTHER      0    0  UNDGR     12  B     3     6
                          M    0     0     0 NO. JOINT APPTS          0                                 M     0     0
                          D    0     0     0                                                            D     0     0

OTH PROGRAM               A    0     0     0    2    0    0    3    3 FACULTY    0    2  GRAD       0  A     0     0
IN DEPT OF ISY            B    1     1     1                          CTHER      0    0  UNDGR     65  B     0     0
                          M    0     0     0 NO. JOINT APPTS          1                                 M     0     0
                          D    0     0     0                                                            D     0     0

OTH PROGRAM               A    1     1     1   14    2    1    5   15 FACULTY    1    7  GRAD       0  A     2     4
IN DEPT OF MAT            B    4     4     4                          CTHER      0    0  UNDGR    129  B    21    27
                          M    0     0     0 NO. JOINT APPTS          3                                 M     0     0
                          D    0     0     0                                                            D     0     0

OTH PROGRAM               A    0     0     0   11    0    0    0   11 FACULTY    0   10  GRAD       0  A     0     0
IN DEPT OF MSC            B    2     2     2                          OTHER      0    0  UNDGR     30  B     9    13
                          M    0     0     0 NO. JCINT APPTS          0                                 M     0     0
                          D    0     0     0                                                            D     0     0

OTH PROGRAM               A    0     0     0   16    0    0    9   19 FACULTY    3   14  GRAD       0  A     0     0
IN DEPT OF NEC            B    3     3     3                          OTHER      0    0  UNDGR    265  B    64    86
                          M    0     0     0 NO. JOINT APPTS          0                                 M     0     0
                          D    0     0     0                                                            D     0     0

SAN PROGRAM               A    1     1     1    2    0    0    0    2 FACULTY    0    0  GRAD       0  A     5     5
IN DEPT OF BAD            B    0     0     0                          OTHER      0    0  UNDGR     20  B     0     0
                          M    0     0     0 NO. JOINT APPTS          0                                 M     0     0
                          D    0     0     0                                                            D     0     0
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                                                      SUMMARY BY DEGREE PROGRAMS
        GROUP (        (MASTERS  :              ) CONTINUED
                                                        (AS OF JUNE 30, 1977)

  PROGRAM NAME                     DEGREE LEVEL AND     *******          S T A F F        *******  MAJORS              DEGREES
     AND DEPARTMENT                  YEAR OFFERED       FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED            AWARDED
                                   76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE          COMP-SC OTHR  1976 - 1977        76-77 77-78

SCS PROGRAM                      A    0     0     0    9    0    2    4    14 FACULTY     1     5  GRAD       0  A     0     0
IN DEPT OF SCS                   B    1     1     1                          OTHER       0     0  UNDGR    129  B    43    50
                                 M    0     0     1  NO. JOINT APPTS       2                                   M     0     0
                                 D    0     0     0                                                            D     0     0

SYS PROGRAM                      A    0     0     0    5    0    0    6     8 FACULTY     0     3  GRAD       4  A     0     0
IN DEPT OF SYS                   B    1     1     1                          OTHER       0     0  UNDGR    180  B    70    75
                                 M    1     1     1  NO. JOINT APPTS       1                                   M     0     1
                                 D    0     0     0                                                            D     0     0
INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
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                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                             SUMMARY BY DEGREE PROGRAMS

     GROUP 1        :DOCTORATE:             )
                                             (AS OF JUNE 30, 1977)

PROGRAM NAME           DEGREE LEVEL AND    *******          S T A F F          *******  MAJORS            DEGREES
   AND DEPARTMENT        YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED          AWARDED
                       76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE        COMP-SC OTHR  1976 - 1977       76-77 77-78
                                              8   15   11    0   34 FACULTY    7    1  GRAD     60  A       0     0
CEN PROGRAM            A   0     0     0                        OTHER      0    0  UNDGR   115  B      24    20
IN DEPT OF CSE         B   1     1     1                                                        M       9     6
                       M   1     1     1  NO. JOINT APPTS         0                             D       3     3
                       D   1     1     1
                                             40   27   25    7   67 FACULTY   21   17  GRAD     75  A       0     0
CEN PROGRAM            A   0     0     0                        OTHER      0    0  UNDGR   355  B      79    87
IN DEPT OF EEN         B   4     5     6                                                        M      16    18
                       M   2     3     3  NO. JOINT APPTS         1                             D       5     6
                       D   2     2     3
                                              6    0    4    0    0 FACULTY    0    8  GRAD     30  A       0     0
CEN PROGRAM            A   0     0     0                        OTHER      0    0  UNDGR   100  B      10    15
IN DEPT OF ENG         B   1     1     1                                                        M       3    15
                       M   1     1     1  NO. JOINT APPTS         1                             D       0     0
                       D   0     0     0
                                             40   26   46   32   82 FACULTY   24   13  GRAD    236  A       0     0
CIS PROGRAM            A   0     0     0                        OTHER      1    0  UNDGR   570  B     118   134
IN DEPT OF CIS         B   2     2     2                                                        M      75    78
                       M   2     2     2  NO. JOINT APPTS         6                             D       5    14
                       D   1     1     1
                                              6    5    3    0    7 FACULTY    3    3  GRAD      0  A       0     0
CPR PROGRAM            A   0     0     0                        OTHER      0    0  UNDGR    60  B      14     8
IN DEPT OF SCS         B   1     1     1                                                        M       0     0
                       M   0     0     1  NO. JOINT APPTS         4                             D       0     0
                       D   0     0     0
                                             45   18   22   39   87 FACULTY   16   37  GRAD    200  A       0     0
CSC PROGRAM            A   0     0     0                        OTHER      0    0  UNDGR   590  B     122   181
IN DEPT OF CIS         B   3     5     5                                                        M      39    47
                       M   4     4     5  NO. JOINT APPTS         6                             D       5     6
                       D   2     2     3
                                             25   12   12   19   38 FACULTY   12   22  GRAD    215  A       0     0
CSC PROGRAM            A   0     0     0                        OTHER      0    0  UNDGR   246  B      43    67
IN DEPT OF COM         B   4     4     4                                                        M      50    58
                       M   2     2     3  NO. JOINT APPTS        16                             D       0     0
                       D   0     0     0
                                            567  369  567  320  963 FACULTY  270  288  GRAD   3629  A       1     5
CSC PROGRAM            A   1     1     1                        OTHER     25   30  UNDGR  8536  B    1642  2004
IN DEPT OF CSC         B  52    54    54                                                        M     769   879
                       M  41    44    46  NO. JOINT APPTS       203                             D     119   156
                       D  27    28    29
                                             53    0   31   10   67 FACULTY   15   38  GRAD    238  A       0     0
CSC PROGRAM            A   0     0     0                        OTHER      3    6  UNDGR   166  B      17    20
IN DEPT OF EEN         B   2     2     2                                                        M       7    10
                       M   2     2     2  NO. JOINT APPTS         1                             D       1     0
                       D   1     1     1
                                              4    0    0    2    5 FACULTY    0    4  GRAD      0  A       0     0
CSC PROGRAM            A   0     0     0                        OTHER      0    1  UNDGR   175  B       8    20
IN DEPT OF ENG         B   1     1     1                                                        M       0     0
                       M   0     0     0  NO. JOINT APPTS         1                             D       0     0
                       D   0     0     0
                                              3    0    0    5    6 FACULTY    0    2  GRAD      0  A       0     0
CSC PROGRAM            A   0     0     0                        OTHER      0    0  UNDGR   232  B       1    10
IN DEPT OF ICS         B   1     1     1                                                        M       0     0
                       M   0     0     0  NO. JOINT APPTS         1                             D       0     0
                       D   0     0     0
                                              4    0    2    2    6 FACULTY    2    4  GRAD     25  A       0     0
CSC PROGRAM            A   0     0     0                        OTHER      1    0  UNDGR    58  B       3     8
IN DEPT OF IEN         B   2     2     2                                                        M       8    10
                       M   1     1     1  NO. JOINT APPTS         2                             D       2     2
                       D   1     1     1
                                             47    2   34   29   76 FACULTY   20   26  GRAD    145  A       0     0
CSC PROGRAM            A   0     0     0                        OTHER      0   11  UNDGR   557  B     109   155
IN DEPT OF MAT         B   9    11    11                                                        M      33    43
                       M   8    10    10  NO. JOINT APPTS        21                             D       1     8
                       D   2     2     2
                                             39    4   14    3   43 FACULTY   10   27  GRAD    152  A       0     0
CSC PROGRAM            A   0     0     0                        OTHER      2    1  UNDGR   329  B      59    87
IN DEPT OF MSC         B   7     7     7                                                        M      42    48
                       M   5     5     5  NO. JOINT APPTS         2                             D       0     3
                       D   2     2     2
                                             47    7   11   10   60 FACULTY   22   29  GRAD     76  A       0     0
CSC PROGRAM            A   0     0     0                        OTHER      0    0  UNDGR   402  B      96   135
IN DEPT OF NEC         B   3     4     4                                                        M      13    15
                       M   3     3     3  NO. JOINT APPTS        35                             D       3     3
                       D   3     3     3
                                             20    0   11   13   21 FACULTY   13    1  GRAD     69  A       0     0
CSC PROGRAM            A   0     0     0                        OTHER      0    0  UNDGR   554  B      59    70
IN DEPT OF SCS         B   2     2     2                                                        M      10    13
                       M   2     2     2  NO. JOINT APPTS         2                             D       6     6
                       D   1     1     1
                                              0   12    0   10    4 FACULTY    7    3  GRAD     50  A       0     0
CSE PROGRAM            A   0     0     0                        OTHER      0    0  UNDGR     0  B       0     0
IN DEPT OF COM         B   0     0     0                                                        M      12    15
                       M   1     1     1  NO. JOINT APPTS         7                             D       0     0
                       D   0     0     0
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                                          SUMMARY BY DEGREE PROGRAMS
      GROUP (        :DOCTORATE:          ) CONTINUED
                                               (AS OF JUNE 30, 1977)

PROGRAM NAME             DEGREE LEVEL AND   *******          S T A F F       *******  MAJORS            DEGREES
  AND DEPARTMENT          YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED          AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE      COMP-SC OTHR 1976 - 1977       76-77 77-78

CSE PROGRAM              A    0     0     0     7    9    4    3   15 FACULTY     0     5 GRAD     29 A     0     0
IN DEPT OF CSC           B    1     1     1                           OTHER       0     0 UNDGR    55 B    22    34
                         M    1     1     1 NO. JOINT APPTS         1                                 M     4     5
                         D    1     1     1                                                           D     2     2

CSE PROGRAM              A    0     0     0    15    8   10    0   24 FACULTY    15     0 GRAD    135 A     0     0
IN DEPT OF CSE           B    1     1     1                           OTHER       0     0 UNDGR    95 B    25    28
                         M    2     2     2 NO. JOINT APPTS         0                                 M    25    25
                         D    1     1     1                                                           D     1     3

CSE PROGRAM              A    0     0     0    33    7   19   20   43 FACULTY     3    24 GRAD    460 A     0     0
IN DEPT OF EEN           B    5     5     5                           OTHER       0     7 UNDGR   824 B   116   176
                         M    3     3     3 NO. JOINT APPTS         1                                 M    87   107
                         D    3     3     3                                                           D    12    16

CSE PROGRAM              A    0     0     0    42    0    0    2   44 FACULTY     5    22 GRAD     50 A     0     0
IN DEPT OF NEC           B    1     1     1                           OTHER       0     4 UNDGR   101 B    22    21
                         M    1     1     1 NO. JOINT APPTS         3                                 M     9    15
                         D    1     1     1                                                           D     3     5

CST PROGRAM              A    0     0     0     1    0    0    4    2 FACULTY     0     5 GRAD      0 A     0     0
IN DEPT OF ENG           B    1     1     1                           OTHER       0     0 UNDGR    57 B     7    10
                         M    0     0     0 NO. JOINT APPTS         0                                 M     0     0
                         D    0     0     0                                                           D     0     0

CST PROGRAM              A    1     1     1     1    0    2    0    2 FACULTY     0     0 GRAD      0 A     5     5
IN DEPT OF NEC           B    0     0     0                           OTHER       0     2 UNDGR    10 B     0     0
                         M    0     0     0 NO. JOINT APPTS         0                                 M     0     0
                         D    0     0     0                                                           D     0     0

CTE PROGRAM              A    1     1     1     2    0    0    0    2 FACULTY     0     0 GRAD      0 A     1     1
IN DEPT OF BAD           B    0     0     0                           OTHER       0     0 UNDGR     5 B     0     0
                         M    0     0     0 NO. JOINT APPTS         0                                 M     0     0
                         D    0     0     0                                                           D     0     0

CTE PROGRAM              A    2     2     2     5    0    0    1    2 FACULTY     0     0 GRAD      0 A    20    22
IN DEPT OF CTE           B    0     0     0                           OTHER       0     0 UNDGR   211 B     0     0
                         M    0     0     0 NO. JOINT APPTS         0                                 M     0     0
                         D    0     0     0                                                           D     0     0

DPR PROGRAM              A    0     0     0    10    0    4    5   11 FACULTY     5     3 GRAD     39 A     0     0
IN DEPT OF BAD           B    3     3     3                           OTHER       0     0 UNDGR   381 B    32    75
                         M    1     1     1 NO. JOINT APPTS         3                                 M    18    20
                         D    1     1     1                                                           D     0     1

DPR PROGRAM              A    1     1     1     3    0    1    3    4 FACULTY     0     0 GRAD      0 A    55    68
IN DEPT OF BUS           B    0     0     0                           OTHER       0     0 UNDGR   342 B     0     0
                         M    0     0     0 NO. JOINT APPTS         0                                 M     0     0
                         D    0     0     0                                                           D     0     0

DPR PROGRAM              A    1     1     1     9    4    8    3   14 FACULTY     2     5 GRAD      0 A    32    35
IN DEPT OF DPR           B    1     1     1                           OTHER       0     0 UNDGR   151 B    12    25
                         M    0     0     0 NO. JOINT APPTS         2                                 M     0     0
                         D    0     0     0                                                           D     0     0

DPR PROGRAM              A    1     1     1     0    0    3    8    4 FACULTY     3     0 GRAD      0 A    10    25
IN DEPT OF ENG           B    0     0     0                           OTHER       0     0 UNDGR    65 B     0     0
                         M    0     0     0 NO. JOINT APPTS         4                                 M     0     0
                         D    0     0     0                                                           D     0     0

ICS PROGRAM              A    0     0     0     2    0    0    0    2 FACULTY     1     1 GRAD      0 A     0     0
IN DEPT OF BAD           B    1     1     1                           OTHER       0     0 UNDGR    15 B     8     9
                         M    0     0     0 NO. JOINT APPTS         0                                 M     0     0
                         D    0     0     0                                                           D     0     0

ICS PROGRAM              A    0     0     0    36   17   13   23   59 FACULTY     8    13 GRAD    217 A     0     0
IN DEPT OF ICS           B    2     2     2                           OTHER       1     1 UNDGR   520 B   113   149
                         M    2     2     2 NO. JOINT APPTS         2                                 M    70    63
                         D    2     2     2                                                           D     5     4

ISC PROGRAM              A    0     0     0     1    0    1   10    3 FACULTY     1     0 GRAD      0 A     0     0
IN DEPT OF BAD           B    0     1     1                           OTHER       0     0 UNDGR    20 B     0     5
                         M    0     0     0 NO. JOINT APPTS         0                                 M     0     0
                         D    0     0     0                                                           D     0     0

ISC PROGRAM              A    0     0     0    17    3    8    6   25 FACULTY     7    13 GRAD     22 A     0     0
IN DEPT OF ISC           B    1     1     1                           OTHER       0     0 UNDGR    77 B    20    30
                         M    2     2     2 NO. JOINT APPTS         6                                 M     3     8
                         D    2     2     2                                                           D     3     6

ISC PROGRAM              A    0     0     0    11    5    0   30   23 FACULTY     1     2 GRAD    316 A     0     0
IN DEPT OF NEC           B    0     0     0                           OTHER       0     0 UNDGR     0 B     0     0
                         M    1     1     1 NO. JOINT APPTS         0                                 M   122   130
                         D    0     0     0                                                           D     0     0
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                                                   SUMMARY BY CEGREE PROGRAMS
    GROUP (        :DOCTORATE:             ) CONTINUED
                                                 (AS OF JUNE 30, 1977)

 PROGRAM NAME            DEGREE LEVEL AND    *******          S T A F F        *******  MAJORS          DEGREES
   AND DEPARTMENT         YEAR OFFERED       FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED        AWARDEC
                          76-77 77-78 78-79  TIME RA-S TA-S OTHR  FTE          COMP-SC OTHR 1976 - 1977    76-77 77-78

ISY PROGRAM               A   0     0     0    17    2    3    2   21 FACULTY    4    5  GRAD     18  A     0     0
IN DEPT OF BAD            B   3     3     3                          CTHER      0    1  UNCGR    60  B    20    27
                          M   1     1     1  NO. JOINT APPTS        1                                  M     8    10
                          D   1     1     1                                                            D     0     0

ISY PROGRAM               A   0     0     0     2    0   10    3    6 FACULTY    1    3  GRAD      8  A     0     0
IN DEPT OF COM            B   1     1     1                          OTHER     .0    0  UNDGR   105  B    20    25
                          M   1     1     1  NO. JCINT APPTS        0                                  M     7    10
                          D   0     0     0                                                            D     0     0

ISY PROGRAM               A   0     0     0    15    1    4    5   18 FACULTY    6   10  GRAD    102  A     0     0
IN DEPT OF EEN            B   1     1     1                          CTHER      2    0  UNDGR    47  B    16    15
                          M   1     1     1  NO. JOINT APPTS        5                                  M    37    40
                          D   1     1     1                                                            D     8     8

ISY PROGRAM               A   0     0     0     4    4    7    5    4 FACULTY    1    4  GRAD     40  A     0     0
IN DEPT OF IEN      [illegible]   1     1     1                          OTHER      4    0  UNDGR    59  B    17    16
                          M   1     1     1  NO. JCINT APPTS        0                                  M    15    15
                          C   1     1     1                                                            D     1     7

ISY PROGRAM               A   1     1     0    41   13   52   21   84 FACULTY   23    9  GRAD    174  A     3    15
IN DEPT OF ISY            B   5     5     5                          CTHER      0    3  UNDGR   485  B    65    77
                          M   2     2     3  NO. JOINT APPTS        5                                  M    31    45
                          D   1     1     1                                                            D     4     5

ISY PROGRAM               A   0     0     0    12    2    7    7   10 FACULTY    7    0  GRAD      0  A     0     0
IN DEPT OF NEC            B   1     1     1                          CTHER      0    0  UNDGR   160  B    30    40
                          M   1     1     1  NO. JCINT APPTS        0                                  M     0     0
                          D   1     1     1                                                            D     0     0

OTH PROGRAM               A   0     0     0    16    9   15   15   29 FACULTY    2   13  GRAD     98  A     0     0
IN DEPT OF BAD            B   2     2     2                          OTHER      0    0  UNDGR   468  B    70    85
                          M   2     2     2  NO. JOINT APPTS        0                                  M    14    18
                          D   2     2     2                                                            D     1     3

OTH PROGRAM               A   0     0     0     4    0    0    3    5 FACULTY    1    1  GRAD     20  A     0     0
IN DEPT OF CIS            B   0     0     1                          OTHER      0    0  UNDGR     0  B     0     0
                          M   0     0     1  NO. JOINT APPTS        0                                  M     0     0
                          D   0     0     0                                                            D     0     0

OTH PROGRAM               A   0     0     0     5    8 [illegible]    0    8 FACULTY    0    3  GRAD     12  A     0     0
IN DEPT OF CSC            B   0     0     0                          CTHER      1    0  UNDGR     0  B     0     0
                          M   1     1     1  NO. JOINT APPTS        2                                  M     8     7
                          D   1     1     1                                                            D     0     3

OTH PROGRAM               A   0     0     0    29   27   14   36   60 FACULTY    9   23  GRAD    101  A     0     0
IN DEPT CF EEN            B   3     3     3                          CTHER      0    5  UNDGR   302  B    50    56
                          M   2     2     2  NO. JCINT APPTS       13                                  M    38    38
                          D   3     3     3                                                            D     6     5

OTH PROGRAM               A   0     0     0    13    0   21    0   18 FACULTY    3   10  GRAD     42  A     0     0
IN DEPT OF MSC            B   1     1     1                          CTHER      0    0  UNDGR    65  B    15    12
                          M   1     1     1  NO. JOINT APPTS        8                                  M     9     5
                          D   1     1     1                                                            D     1     4

OTH PROGRAM               A   0     0     0    10    5    1   12   15 FACULTY    7   12  GRAD    100  A     0     0
IN DEPT OF NEC            B   1     1     2                          OTHER      0    7  UNDGR    10  B     0     0
                          M   3     3     3  NO. JOINT APPTS        7                                  M    19    21
                          C   1     1     1                                                            D     0     0

OTH PROGRAM               A   0     0     0     0    0    0    6    4 FACULTY    0    0  GRAD      0  A     0     0
IN DEPT OF SCS            B   1     1     1                          CTHER      0    6  UNDGR     0  B     0     0
                          M   0     0     0  NO. JOINT APPTS        6                                  M     0     0
                          D   0     0     0                                                            D     0     0

SAN PROGRAM               A   0     0     0    10    0    0    2   11 FACULTY    0    0  GRAD      0  A     0     0
IN DEPT CF SAN            B   1     1     1                          OTHER      0    0  UNDGR   356  B    72    99
                          M   0     0     0  NO. JCINT APPTS        0                                  M     0     0
                          D   0     0     0                                                            D     0     0

SCE PROGRAM               A   0     0     0     5    1    3    8    9 FACULTY    5    1  GRAD     20  A     0     0
IN DEPT OF ENG            B   1     1     1                          CTHER      0    0  UNDGR   100  B    18    25
                          M   1     1     1  NO. JCINT APPTS        3                                  M    10    20
                          D   0     0     0                                                            D     0     0

SEN PRCGRAM               A   0     0     0     0    0    0    3    1 FACULTY    0    2  GRAD      2  A     0     0
IN DEPT OF ENG            B   0     0     0                          OTHER      0    0  UNDGR     C  B     0     0
                          M   1     1     1  NO. JOINT APPTS        0                                  M     2     4
                          C   0     0     0                                                            D     0     0

SEN PROGRAM               A   0     0     0     5    4    2    0    6 FACULTY    0    4  GRAC     20  A     0     0
IN DEPT CF IEN            B   1     1     1                          CTHER      0    0  UNDGR    85  B    21    20
                          M   1     1     1  NO. JCINT APPTS        0                                  M    13    15
                          D   0     0     0                                                            D     0     0
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                                                SUMMARY BY DEGREE PROGRAMS
      GROUP I       (DOCTORATE)               ) CONTINUED
                                                 (AS OF JUNE 30, 1977)

 PROGRAM NAME              DEGREE LEVEL AND    *******            S T A F F          ******* MAJORS            DEGREES
    AND DEPARTMENT           YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED           AWARDED
                             76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE      COMP-SC OTHR  1976 - 1977        76-77 77-78

SIS PROGRAM                  A   0     0     0    2    0    0    0    2 FACULTY    1     3 GRAD      0  A      0     0
IN DEPT OF IEN               B   1     1     1                          OTHER      0     0 UNDGR   108  B     23    35
                             M   0     0     0 NO. JOINT APPTS      0                                   M      0     0
                             D   0     0     0                                                          D      0     0

SIS PROGRAM                  A   0     0     0    6    2   12   10    8 FACULTY    4     2 GRAD     25  A      0     0
IN DEPT OF SIS               B   1     1     1                          OTHER      0     0 UNDGR   100  B     30    35
                             M   1     1     1 NO. JOINT APPTS      2                                   M      3     3
                             D   1     1     1                                                          D      2     2

SYS PROGRAM                  A   0     0     0    0    0    0   20    6 FACULTY    3    16 GRAD     26  A      0     0
IN DEPT OF CSC               B   0     0     0                          OTHER      0     0 UNDGR     0  B      0     0
                             M   1     1     1 NO. JOINT APPTS     20                                   M      2     3
                             D   0     0     0                                                          D      0     0
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                                                     SUMMARY BY CEGREE PRCGRAMS
         GROUP (        :           :            )
                                                      (AS OF JUNE 30, 1977)

 PROGRAM NAME              DEGREE LEVEL AND   *******         S T A F F          *******  MAJORS          DEGREES
    AND DEPARTMENT           YEAR OFFERED     FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED        AWARDED
                           76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE       COMP-SC OTHR  1976 - 1977     76-77 77-78

BAD PROGRAM                A   1     1     1    0    0    0    1    1 FACULTY    0     0  GRAD      0  A     0     0
IN DEPT OF                 B   0     0     0                          OTHER      0     0  UNDGR     0  B     0     0
                           M   0     0     0 NO. JOINT APPTS        0                                M     0     0
                           D   0     0     0                                                         D     0     0

CEN PROGRAM                A   1     1     1   60   43   44   13  110 FACULTY   31    30  GRAD    205  A     8     8
IN DEPT OF                 B   7     8     9                          CTHER      0     0  UNDGR   596  B   125   137
                           M   6     7     7 NO. JOINT APPTS        6                                M    43    56
                           D   3     3     4                                                         D     8     9

CIS PRCGRAM                A   2     2     2   50   26   48   32   92 FACULTY   26    13  GRAD    236  A     0    10
IN DEPT OF                 B   5     5     5                          OTHER      1     2  UNDGR   670  B   124   154
                           M   2     2     2 NO. JOINT APPTS        6                                M    75    78
                           D   1     1     1                                                         D     5    14

CPR PROGRAM                A  36    37    37   99    5   34  104  143 FACULTY    5    12  GRAD      0  A   591   691
IN DEPT OF                 B   4     4     4                          CTHER      0     1  UNDGR  4103  B    35    42
                           M   0     0     1 NO. JOINT APPTS       19                                M     0     0
                           D   0     0     0                                                         D     0     0

CSC PROGRAM                A  63    63    64 1304  439  822  809 2249 FACULTY  493   695  GRAD   5525  A   647   761
IN DEPT CF                 B 181   197   199                          OTHER     41    82  UNDGR 22588  B  3417  4327
                           M  81    88    93 NO. JOINT APPTS      451                                M  1086  1274
                           D  40    41    43                                                         D   135   185

CSE PROGRAM                A   1     1     1  118   36   33   51  159 FACULTY   30    54  GRAD    754  A     5     5
IN DEPT OF                 B   9     9     9                          CTHER      0    13  UNDGR  1180  B   207   299
                           M   9     9     9 NO. JOINT APPTS       13                                M   146   187
                           D   6     6     6                                                         D    18    26

CST PRCGRAM                A   9     9     9   33    5    8   13   51 FACULTY    1    11  GRAD     40  A    85   140
IN DEPT OF                 B   3     3     3                          OTHER      8     2  UNDGR   475  B    22    65
                           M   1     1     1 NO. JOINT APPTS        5                                M    15    40
                           D   0     0     0                                                         D     0     0

CTE PROGRAM                A  12    12    12   26    0   12   32   43 FACULTY    0     2  GRAD      0  A   149   213
IN DEPT OF                 B   1     1     1                          CTHER      0     2  UNDGR  1789  B     9     7
                           M   0     0     0 NO. JOINT APPTS        4                                M     0     0
                           D   0     0     0                                                         D     0     0

DPR PROGRAM                A 179   183   184  558   24  259  563 1040 FACULTY   28    33  GRAD     48  A  3058  3762
IN DEPT OF                 B  27    27    27                          OTHER      6    15  UNDGR 22044  B   380   619
                           M   2     2     2 NO. JOINT APPTS      110                                M    18    21
                           D   1     1     1                                                         D     3     1

EDP PROGRAM                A   1     1     1    1    0    0    6    3 FACULTY    0     0  GRAD      0  A     0     0
IN DEPT OF                 B   0     0     0                          CTHER      0     0  UNDGR    15  B     0     0
                           M   0     0     0 NO. JOINT APPTS        0                                M     0     0
                           D   0     0     0                                                         D     0     0

ICS PROGRAM                A   2     2     2   48   17   13   34   74 FACULTY   10    19  GRAD    217  A    18    25
IN DEPT OF                 B   5     5     5                          OTHER      1     1  UNDGR   828  B   166   209
                           M   2     2     2 NO. JOINT APPTS        4                                M    70    63
                           D   2     2     2                                                         D     5     4

IPR PROGRAM                A   1     1     1   14    0    0    1   16 FACULTY    0     0  GRAD      0  A    19    19
IN DEPT OF                 B   1     1     1                          CTHER      0     1  UNDGR   335  B     5    15
                           M   0     0     0 NO. JOINT APPTS        0                                M     0     0
                           D   0     0     0                                                         D     0     0

ISC PROGRAM                A   1     1     1   53   16   13   53   81 FACULTY   13    24  GRAD    338  A     0     0
IN DEPT OF                 B   8    10    10                          OTHER      0 [illegible]  UNDGR   334  B    78    99
                           M   3     3     3 NO. JOINT APPTS       11                                M   125   138
                           D   2     2     2                                                         D     3     6

ISY PROGRAM                A   6     6     5  145   22   85   84  215 FACULTY   51    49  GRAD    431  A    76    99
IN DEPT OF                 B  24    24    24                          OTHER      6     7  UNDGR  2252  B   390   432
                           M   8     8    10 NO. JOINT APPTS       17                                M   108   131
                           D   5     5     5                                                         D    13    15

MSC PROGRAM                A   0     0     0   12    0    0    0   12 FACULTY    0     0  GRAD      0  A     0     0
IN DEPT OF                 B   1     1     1                          OTHER      2     0  UNDGR   100  B    21    19
                           M   0     0     0 NO. JOINT APPTS        0                                M     0     0
                           C   0     0     0                                                         D     0     0

NEC PROGRAM                A   0     0     0    6    0    2    2    8 FACULTY    0     0  GRAD     62  A     0     0
IN DEPT OF                 B   0     0     0                          CTHER      0     0  UNDGR     0  B     0     0
                           M   1     1     1 NO. JOINT APPTS        0                                M    31    20
                           D   0     0     0                                                         D     0     0

OTH PROGRAM                A  14    14    13  200   51   78  118  316 FACULTY   28   123  GRAD    373  A   124   159
IN DEPT CF                 B  31    33    37                          OTHER      3    22  UNDGR  2631  B   264   356
                           M   9     9    10 NO. JOINT APPTS       50                                M    88    89
                           D   8     8     8                                                         D     8    15
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                                               SUMMARY BY DEGREE PROGRAMS
     GROUP (        :         )           ) CONTINUED
                                                  (AS OF JUNE 30, 1977)

PROGRAM NAME             DEGREE LEVEL AND    *******          S T A F F        *******  MAJORS           DEGREES
  AND DEPARTMENT           YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED         AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE       COMP-SC OTHR  1976 - 1977      76-77 77-78

SAN PROGRAM               A   1    1    1    12    0    0    2   13 FACULTY    0    0 GRAD      0  A     5    5
IN DEPT OF                B   1    1    1                          OTHER      0    0 UNDGR   376  B    72   99
                          M   0    0    0  NO. JOINT APPTS        0                                M     0    0
                          D   0    0    0                                                          D     0    0

SCE PROGRAM               A   0    0    0     5    1    3    8    5 FACULTY    5    1 GRAD     20  A     0    0
IN DEPT OF                B   1    1    1                          OTHER      0    0 UNDGR   100  B    18   25
                          M   1    1    1  NO. JOINT APPTS        3                                M    10   20
                          D   0    0    0                                                          D     0    0

SCS PROGRAM               A   0    0    0     9    0    2    4   14 FACULTY    1    5 GRAD      0  A     0    0
IN DEPT OF                B   1    1    1                          OTHER      0    0 UNDGR   129  B    43   50
                          M   0    0    1  NO. JOINT APPTS        2                                M     0    0
                          D   0    0    0                                                          D     0    0

SEA PROGRAM               A   0    0    0     5    4    2    3    7 FACULTY    0    6 GRAD     22  A     0    0
IN DEPT OF                B   1    1    1                          OTHER      0    0 UNDGR    85  B    21   20
                          M   2    2    2  NO. JOINT APPTS        0                                M    15   19
                          D   0    0    0                                                          D     0    0

SIS PROGRAM               A   0    0    0     8    2   12   10   10 FACULTY    5    5 GRAD     25  A     0    0
IN DEPT OF                B   2    2    2                          OTHER      0    0 UNDGR   208  B    53   70
                          M   1    1    1  NO. JOINT APPTS        2                                M     3    3
                          D   1    1    1                                                          D     2    2

SYS PROGRAM               A   0    0    0     5    0    0   26   14 FACULTY    3   19 GRAD     30  A     0    0
IN DEPT OF                B   1    1    1                          OTHER      0    0 UNDGR   180  B    70   75
                          M   2    2    2  NO. JOINT APPTS       21                                M     2    4
                          D   0    0    0                                                          D     0    0
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   INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                     CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                  SUMMARY BY DEGREE PROGRAMS
        GROUP (PUBLIC :ASSOCIATE:BELOW 500     )
                                                   (AS OF JUNE 30, 1977)

  PROGRAM NAME               DEGREE LEVEL AND    *******           S T A F F          ******* MAJORS          DEGREES
     AND DEPARTMENT            YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED         AWARDED
                             76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE        COMP-SC OTHR 1976 - 1977      76-77 77-78

 CPR PROGRAM                A    1     1     1     1    0    0    0    1 FACULTY    0    0 GRAD       0  A     5     6
 IN DEPT OF                 B    0     0     0                            OTHER      0    0 UNDGR      5  B     0     0
                            M    0     0     0 NO. JOINT APPTS          0                                  M     0     0
                            D    0     0     0                                                             D     0     0

 CSC PROGRAM                A    1     1     1     3    0    0    2    3 FACULTY    0    0 GRAD       0  A    11    11
 IN DEPT OF                 B    0     0     0                            OTHER      0    0 UNDGR     30  B     0     0
                            M    0     0     0 NO. JOINT APPTS          0                                  M     0     0
                            D    0     0     0                                                             D     0     0
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   INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                     CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                  SUMMARY BY DEGREE PROGRAMS
        GROUP (PUBLIC :ASSOCIATE:500-2499      )
                                                   (AS OF JUNE 30, 1977)

  PROGRAM NAME               DEGREE LEVEL AND    *******           S T A F F          ******* MAJORS          DEGREES
     AND DEPARTMENT            YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED         AWARDED
                             76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE        COMP-SC OTHR 1976 - 1977      76-77 77-78

 BAD PROGRAM                A    1     1     1     0    0    0    1    1 FACULTY    0    0 GRAD       0  A     0     0
 IN DEPT OF                 B    0     0     0                            OTHER      0    0 UNDGR      0  B     0     0
                            M    0     0     0 NO. JOINT APPTS          0                                  M     0     0
                            D    0     0     0                                                             D     0     0

 CPR PROGRAM                A    9     9     9    16    0    5   16   22 FACULTY    0    2 GRAD       0  A   116   122
 IN DEPT OF                 B    0     0     0                            OTHER      0    0 UNDGR    486  B     0     6
                            M    0     0     0 NO. JOINT APPTS          0                                  M     0     0
                            D    0     0     0                                                             D     0     0

 CSC PROGRAM                A   12    12    12    29    3    8    4   35 FACULTY    0    7 GRAD       0  A   134   148
 IN DEPT OF                 B    0     0     0                            OTHER      1    0 UNDGR    478  B     0     0
                            M    0     0     0 NO. JOINT APPTS         12                                  M     0     0
                            D    0     0     0                                                             D     0     0

 CSE PROGRAM                A    1     1     1     1    0    0    2    2 FACULTY    0    0 GRAD       0  A     5     5
 IN DEPT OF                 B    0     0     0                            OTHER      0    2 UNDGR     15  B     0     0
                            M    0     0     0 NO. JOINT APPTS          1                                  M     0     0
                            D    0     0     0                                                             D     0     0

 CST PROGRAM                A    2     2     2     4    0    0    2    5 FACULTY    0    0 GRAD       0  A    13    35
 IN DEPT OF                 B    0     0     0                            OTHER      0    0 UNDGR     43  B     0     0
                            M    0     0     0 NO. JOINT APPTS          0                                  M     0     0
                            D    0     0     0                                                             D     0     0

 CTE PROGRAM                A    3     3     3     3    0    0    3    4 FACULTY    0    0 GRAD       0  A    24    41
 IN DEPT OF                 B    0     0     0                            OTHER      0    0 UNDGR    135  B     0     0
                            M    0     0     0 NO. JOINT APPTS          1                                  M     0     0
                            D    0     0     0                                                             D     0     0

 DPR PROGRAM                A   51    52    53    84    0   45   37  110 FACULTY    3    1 GRAD       2  A   461   578
 IN DEPT OF                 B    0     0     0                            OTHER      0    0 UNDGR   2821  B     0    80
                            M    0     0     0 NO. JOINT APPTS         42                                  M     0     0
                            D    0     0     0                                                             D     0     0

 OTH PROGRAM                A    4     4     4     8    0    1    2    9 FACULTY    0    0 GRAD       0  A    28    28
 IN DEPT OF                 B    0     0     0                            OTHER      0    0 UNDGR    239  B     0     0
                            M    0     0     0 NO. JOINT APPTS          1                                  M     0     0
                            D    0     0     0                                                             D     0     0
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                                         SUMMARY BY DEGREE PROGRAMS
      GROUP (PUBLIC :ASSOCIATE:2500-9999     )
                                           (AS OF JUNE 30, 1977)

PROGRAM NAME           DEGREE LEVEL AND    *******          S T A F F            ******* MAJORS            DEGREES
  AND DEPARTMENT        YEAR OFFERED       FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED           AWARDED
                       76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE        COMP-SC OTHR  1976 - 1977       76-77 77-78

CPR PROGRAM            A   16    17    17    48    0    0   55   62 FACULTY     0    0 GRAD      0 A    335   392
IN DEPT OF             B    0     0     0                           OTHER       0    0 UNDGR  1953 B      0     0
                       M    0     0     0 NO. JOINT APPTS         3                                  M      0     0
                       D    0     0     0                                                            D      0     0

CSC PROGRAM            A   13    13    13    36    0    7   30   48 FACULTY     0    2 GRAD      0 A    284   299
IN DEPT OF             B    0     0     0                           OTHER       0    0 UNDGR  1030 B      0     0
                       M    0     0     0 NO. JOINT APPTS         2                                  M      0     0
                       D    0     0     0                                                            D      0     0

CST PROGRAM            A    1     1     1     2    0    0    0    2 FACULTY     0    0 GRAD      0 A     20    21
IN DEPT OF             B    0     0     0                           OTHER       0    0 UNDGR    67 B      0     0
                       M    0     0     0 NO. JOINT APPTS         0                                  M      0     0
                       D    0     0     0                                                            D      0     0

CTE PROGRAM            A    3     3     3     9    0    2   17   16 FACULTY     0    0 GRAD      0 A     57   108
IN DEPT OF             B    0     0     0                           OTHER       0    0 UNDGR   768 B      0     0
                       M    0     0     0 NO. JOINT APPTS         1                                  M      0     0
                       D    0     0     0                                                            D      0     0

DPR PROGRAM            A   74    76    76   217   18  100  207  431 FACULTY     5    6 GRAD      0 A   1404  1747
IN DEPT OF             B    0     0     0                           OTHER       5    0 UNDGR  9581 B      0     0
                       M    0     0     0 NO. JOINT APPTS        24                                  M      0     0
                       D    0     0     0                                                            D      3     0

EDP PROGRAM            A    1     1     1     1    0    0    6    3 FACULTY     0    0 GRAD      0 A      0     0
IN DEPT OF             B    0     0     0                           OTHER       0    0 UNDGR    15 B      0     0
                       M    0     0     0 NO. JOINT APPTS         0                                  M      0     0
                       D    0     0     0                                                            D      0     0

IPR PROGRAM            A    1     1     1    11    0    0    0   11 FACULTY     0    0 GRAD      0 A     19    19
IN DEPT OF             B    0     0     0                           OTHER       0    0 UNDGR   245 B      0     0
                       M    0     0     0 NO. JOINT APPTS         0                                  M      0     0
                       D    0     0     0                                                            D      0     0

OTH PROGRAM            A    5     5     5     7    0    8   13   44 FACULTY     1    0 GRAD      0 A     57    70
IN DEPT OF             B    0     0     0                           OTHER       2    0 UNDGR   473 B      0     0
                       M    0     0     0 NO. JOINT APPTS         0                                  M      0     0
                       D    0     0     0                                                            D      0     0
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INVENTORY OF COMPUTERS, APPLICATICNS CF COMPUTERS, ANC INSTRUCTIONAL PROGRAMS IN U.S. HIGHEP EDUCATION FOR 1976-77
             CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                      UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                  PAGE IX-54

                                                   SUMMARY BY CEGREE PROGRAMS
      GROUP (PUBLIC :ASSOCIATE:10,000-19,999)
                                                     (AS OF JUNE 30, 1977)

 PROGRAM NAME               DEGREE LEVEL AND   *******           S T A F F       *******  MAJORS           DEGREES
    AND DEPARTMENT            YEAR OFFERED     FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED          AWARDED
                              76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE        COMP-SC OTHR  1976 - 1977     76-77 77-78

CPR PROGRAM                 A   1     1     1     3    0    0    0    3 FACULTY    0    0 GRAD      0  A     0     0
IN DEPT OF                  B   0     0     0                            OTHER      0    0 UNDGR     0  B     0     0
                            M   0     0     0  NC. JCINT APPTS         2                                  M     0     0
                            D   0     0     0                                                             D     0     0

CSC PROGRAM                 A   6     6     6    15    0    4   38   30 FACULTY    0    1 GRAD      0  A    57    87
IN DEPT OF                  B   0     0     0                            CTHER      0    1 UNDGR   652  B     0     0
                            M   0     0     0  NO. JOINT APPTS         3                                  M     0     0
                            D   0     0     0                                                             D     0     0

DPR PROGRAM                 A  21    21    21    98    1   42  174  276 FACULTY    6    4 GRAD      0  A   578   668
IN DEPT OF                  B   0     0     0                            CTHER      0    0 UNDGR  4069  B     0     0
                            M   0     0     0  NC. JOINT APPTS         3                                  M     0     0
                            D   0     0     0                                                             D     0     0

OTH PROGRAM                 A   1     1     1    10    0    0    4   14 FACULTY    0    0 GRAD      0  A     0     0
IN DEPT OF                  B   0     0     0                            CTHER      0    0 UNDGR     0  B     0     0
                            M   0     0     0  NO. JOINT APPTS         0                                  M     0     0
                            D   0     0     0                                                             D     0     0
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INVENTORY OF COMPUTERS, APPLICATICNS CF COMPUTERS, ANC INSTRUCTIONAL PROGRAMS IN U.S. HIGHER FDUCATION FOR 1976-77
             CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                      UNDER A GRANT FROM THE NATIONAL SCIENCE FCUNDATION

                                                   SUMMARY BY CEGREE PROGRAMS
      GROUP (PUBLIC :ASSOCIATE:20,000 PLUS  )
                                                     (AS OF JUNE 30, 1977)

 PROGRAM NAME               DEGREE LEVEL AND   *******           S T A F F       *******  MAJORS           DEGREES
    AND DEPARTMENT            YEAR OFFERED     FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED          AWARDEC
                              76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE        COMP-SC OTHR  1976 - 1977     76-77 77-78

CPR PROGRAM                 A   1     1     1     8    0   22    3   20 FACULTY    1    0 GRAD      0  A    40    50
IN DEPT OF                  B   0     0     0                            OTHER      0    0 UNDGR   999  B     0     0
                            M   0     0     0  NC. JOINT APPTS         0                                  M     0     0
                            D   0     0     0                                                             D     0     0

CST PROGRAM                 A   1     1     1     3    0    2    0    4 FACULTY    0    0 GRAD      0  A     7    15
IN DEPT OF                  B   0     0     0                            OTHER      0    0 UNDGR    85  B     0     0
                            M   0     0     0  NO. JOINT APPTS         0                                  M     0     0
                            D   0     0     0                                                             D     0     0

CTE PROGRAM                 A   1     1     1     1    0    1    1    1 FACULTY    0    0 GRAD      0  A     6     0
IN DEPT OF                  B   0     0     0                            OTHER      0    0 UNDGR    40  B     0     0
                            M   0     0     0  NC. JOINT APPTS         0                                  M     0     0
                            D   0     0     0                                                             D     0     0

DPR PROGRAM                 A   8     8     8    46    0   37   47   73 FACULTY    0    1 GRAD      0  A   375   433
IN DEPT OF                  B   0     0     0                            CTHER      0    0 UNDGR  1791  B     0     0
                            P   0     0     0  NO. JOINT APPTS         2                                  M     0     0
                            D   0     0     0                                                             D     0     0

ICS PROGRAM                 A   1     1     1     4    0    0    0    4 FACULTY    0    0 GRAD      0  A    16    20
IN DEPT OF                  B   0     0     0                            CTHER      0    0 UNDGP    36  B     0     0
                            M   0     0     0  NC. JCINT APPTS         0                                  M     0     0
                            D   0     0     0                                                             D     0     0

ISY PROGRAM                 A   1     1     1     6    0    0   15   12 FACULTY    0    0 GRAD      0  A    65    72
IN DEPT OF                  B   0     0     0                            CTHER      0    0 UNDGP   358  B     0     0
                            M   0     0     0  NO. JOINT APPTS         3                                  M     0     0
                            D   0     0     0                                                             D     0     0

OTH PROGRAM                 A   1     1     1     1    0    3    0    2 FACULTY    0    1 GRAD      0  A     0     0
IN DEPT OF                  M   0     0     0                            CTHER      0    0 UNDGP     0  B     0     0
                            M   0     0     0  NO. JOINT APPTS         0                                  M     0     0
                            D   0     0     0                                                             D     0     0
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INVENTORY OF COMPUTERS, APPLICATICNS CF COMPUTERS, ANC INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATICN FOR 1976-77
                  CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSCURI-ROLLA
                           UNDER A GRANT FROM THE NATIONAL SCIENCE FCUNDATION

                                                SUMMARY BY CEGREE PROGRAMS
        GROUP (PUBLIC :BACHELCRS:500-2499      )
                                                 (AS OF JUNE 30, 1977)

PROGRAM NAME            CEGREE LEVEL AND    *******          S T A F F         *******  MAJORS          DEGREES
  AND DEPARTMENT         YEAR OFFERED       FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLEC        AWARDED
                        76-77 77-78 78-79  TIME RA-S TA-S CTHR  FTE      COMP-SC OTHR  1976 - 1977     76-77 77-78

CPR PROGRAM             A   1     1     1     0    0    0    0    0 FACULTY   0    2  GRAD      0  A    2     2
IN DEPT OF              B   0     0     0                             OTHER     0    0  UNDGR     4  B    0     0
                        M   0     0     0  NO. JOINT APPTS          5                                M    0     0
                        D   0     0     0                                                            D    0     0

CSC PROGRAM             A   1     1     1     3    0    0    6    5 FACULTY   1    0  GRAD      0  A    6    11
IN DEPT OF              B   1     1     1                             CTHER     0    0  UNCGR   166  B   24    26
                        M   0     0     0  NO. JOINT APPTS          0                                M    0     0
                        D   0     0     0                                                            D    0     0

CST PROGRAM             A   2     2     2     8    0    0    0    8 FACULTY   0    0  GRAD      0  A   33    38
IN DEPT OF              B   1     1     1                             CTHER     0    0  UNDGR   122  B   10    18
                        M   0     0     0  NO. JOINT APPTS          0                                M    0     0
                        D   0     0     0                                                            D    0     0

DPR PROGRAM             A   1     1     1     1    0    1    0    1 FACULTY   0    0  GRAD      0  A   10     8
IN DEPT OF              B   1     1     1                             CTHER     0    0  UNDGR    91  B   23    31
                        M   0     0     0  NO. JOINT APPTS          0                                M    0     0
                        D   0     0     0                                                            D    0     0

MSC PROGRAM             A   0     0     0    12    0    0    0   12 FACULTY   0    0  GRAD      0  A    0     0
IN DEPT OF              B   1     1     1                             OTHER     2    0  UNDGR   100  B   21    19
                        M   0     0     0  NO. JOINT APPTS          0                                M    0     0
                        D   0     0     0                                                            D    0     0

OTH PROGRAM             A   1     1     1     9    0    0    0    9 FACULTY   0    3  GRAD      0  A    0     2
IN DEPT OF              B   1     1     1                             CTHER     0    0  UNDGR    23  B    2     8
                        M   0     0     0  NO. JOINT APPTS          0                                M    0     0
                        D   0     0     0                                                            D    0     0
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INVENTORY OF COMPUTERS, APPLICATICNS CF COMPUTERS, ANC INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATICN FOR 1976-77
                  CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                           UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                SUMMARY BY CEGREE PROGRAMS
        GROUP (PUBLIC :BACHELORS:2500-9999     )
                                                 (AS OF JUNE 30, 1977)

PROGRAM NAME            DEGREE LEVEL AND    *******          S T A F F         *******  MAJORS          DEGREES
  AND DEPARTMENT         YEAR OFFERED       FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED        AWARCED
                        76-77 77-78 78-79  TIME RA-S TA-S CTHR  FTE      COMP-SC OTHR  1976 - 1977     76-77 77-78

CSC PROGRAM             A   2     2     2     7    0    0   15   12 FACULTY   3    7  GRAD      0  A   34    38
IN DEPT OF              B   3     4     4                             OTHER     0    0  UNDGR   236  B   16    26
                        M   0     0     0  NO. JOINT APPTS          6                                M    0     0
                        D   0     0     0                                                            D    0     0

DPR PROGRAM             A   4     4     4    12    0    4    9   16 FACULTY   0    1  GRAD      0  A   21    34
IN DEPT OF              B   2     2     2                             CTHER     1    0  UNDGR   224  B   19    26
                        M   0     0     0  NO. JOINT APPTS          6                                M    0     0
                        D   0     0     0                                                            D    0     0

ISC PROGRAM             A   0     0     0    11    8    0    0   13 FACULTY   1    0  GRAD      0  A    0     0
IN DEPT OF              B   2     2     2                             OTHER     0    0  UNDGR    75  B   33    40
                        M   0     0     0  NO. JOINT APPTS          0                                M    0     0
                        D   0     0     0                                                            D    0     0

OTH PROGRAM             A   1     1     0     9    0    0    1   10 FACULTY   0    0  GRAD      0  A   37    55
IN DEPT OF              B   1     1     2                             CTHER     0    0  UNCGR   413  B    8    13
                        M   0     0     0  NO. JOINT APPTS          0                                M    0     0
                        D   0     0     0                                                            D    0     0
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 INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                      CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                                  UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                     SUMMARY BY DEGREE PROGRAMS

        GROUP (PUBLIC ;MASTERS  ;500-2499     )
                                                      (AS OF JUNE 30, 1977)

                                                                                  *******  MAJORS          DEGREES
 PROGRAM NAME                DEGREE LEVEL AND    *******          S T A F F                ENROLLED        AWARDED
    AND DEPARTMENT             YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES ***  1976 - 1977     76-77 77-78
                            76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE         COMP-SC OTHR

CEN PROGRAM                A   1     1     1     3    1    2    6    5 FACULTY    2     2  GRAD     20  A    8     8
IN DEPT OF                 B   0     0     0                           OTHER      0     0  UNDGR    16  B    0     0
                           M   1     1     1  NO. JOINT APPTS        4                                   M   12    12
                           D   0     0     0                                                             D    0     0

CSC PROGRAM                A   2     2     2     8    0    0    7    9 FACULTY    3     0  GRAD      0  A   10    11
IN DEPT OF                 B   2     3     3                           OTHER      0     0  UNDGR   153  B   10    16
                           M   0     0     1  NO. JOINT APPTS        2                                   M    0     0
                           D   0     0     0                                                             D    0     0

DPR PROGRAM                A   0     1     1     2    0    0    4    3 FACULTY    1     0  GRAD      0  A    0     2
IN DEPT OF                 B   1     1     1                           OTHER      0     0  UNDGR    72  B   25    30
                           M   0     0     0  NO. JOINT APPTS        3                                   M    0     0
                           D   0     0     0                                                             D    0     0

ISC PROGRAM                A   0     0     0     3    0    1    0    3 FACULTY    0     1  GRAD      0  A    0     0
IN DEPT OF                 B   1     1     1                           OTHER      0     0  UNDGR    55  B    9     7
                           M   0     0     0  NO. JOINT APPTS        0                                   M    0     0
                           D   0     0     0                                                             D    0     0

SAN PROGRAM                A   1     1     1     2    0    0    0    2 FACULTY    0     0  GRAD      0  A    5     5
IN DEPT OF                 B   0     0     0                           OTHER      0     0  UNDGR    20  B    0     0
                           M   0     0     0  NO. JOINT APPTS        0                                   M    0     0
                           D   0     0     0                                                             D    0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                            UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                    SUMMARY BY DEGREE PROGRAMS
      GROUP (PUBLIC ;MASTERS  ;2500-9999    )
                                                     (AS OF JUNE 30, 1977)

 PROGRAM NAME              DEGREE LEVEL AND    *******          S T A F F          ******* MAJORS          DEGREES
   AND DEPARTMENT            YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED        AWARDED
                             76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE        COMP-SC OTHR 1976 - 1977     76-77 77-78

CIS PROGRAM                A   1     1     1     1    0    2    0     1 FACULTY    0    0 GRAD      0 A    0     0
IN DEPT OF                 B   1     1     1                            OTHER      0    0 UNDGR     0 B    0     0
                           M   0     0     0  NO. JOINT APPTS         0                              M    0     0
                           D   0     0     0                                                         D    0     0

CPR PROGRAM                A   2     2     2     6    0    1   23    12 FACULTY    1    2 GRAD      0 A   12    20
IN DEPT OF                 B   1     1     1                            OTHER      0    0 UNDGR   287 B   12    11
                           M   0     0     0  NO. JOINT APPTS         0                              M    0     0
                           D   0     0     0                                                         D    0     0

CSC PROGRAM                A   7     7     7   108    6    6   58   134 FACULTY   46   46 GRAD    174 A   53    80
IN DEPT OF                 B  28    28    30                            OTHER      2   23 UNDGR  2874 B  375   396
                           M   2     3     3  NO. JOINT APPTS        25                              M    4    13
                           D   0     0     0                                                         D    0     0

CST PROGRAM                A   1     1     1     1    0    0    7     3 FACULTY    0    3 GRAD      0 A    0    16
IN DEPT OF                 B   0     0     0                            OTHER      0    0 UNDGR    24 B    0     0
                           M   0     0     0  NO. JOINT APPTS         2                              M    0     0
                           D   0     0     0                                                         D    0     0

CTE PROGRAM                A   1     1     1     6    0    3   10    15 FACULTY    0    2 GRAD      0 A   39    37
IN DEPT OF                 B   1     1     1                            OTHER      0    2 UNDGR   620 B    9     7
                           M   0     0     0  NO. JOINT APPTS         0                              M    0     0
                           D   0     0     0                                                         D    0     0

DPR PROGRAM                A   7     7     7    38    0    4   38    53 FACULTY    2   11 GRAD      7 A   46    77
IN DEPT OF                 B  10    10    10                            OTHER      0    7 UNDGR  1417 B  140   183
                           M   1     1     1  NO. JOINT APPTS        10                              M    0     1
                           D   0     0     0                                                         D    0     0

IPR PROGRAM                A   0     0     0     3    0    0    1     5 FACULTY    0    0 GRAD      0 A    0     0
IN DEPT OF                 B   1     1     1                            OTHER      0    1 UNDGR    90 B    5    15
                           M   0     0     0  NO. JOINT APPTS         0                              M    0     0
                           D   0     0     0                                                         D    0     0

ISC PROGRAM                A   0     0     0     3    0    0    1     3 FACULTY    2    1 GRAD      0 A    0     0
IN DEPT OF                 B   1     1     1                            OTHER      0    0 UNDGR    39 B    9     9
                           M   0     0     0  NO. JOINT APPTS         1                              M    0     0
                           D   0     0     0                                                         D    0     0

ISY PROGRAM                A   2     2     2    26    0    2    6    30 FACULTY    5   16 GRAD      0 A    1     5
IN DEPT OF                 B   6     6     6                            OTHER      0    0 UNDGR   454 B   82   125
                           M   0     0     0  NO. JOINT APPTS         0                              M    0     0
                           D   0     0     0                                                         D    0     0

OTH PROGRAM                A   0     0     0    23    2    1   12    29 FACULTY    3   17 GRAD      0 A    0     0
IN DEPT OF                 B   8     8     8                            OTHER      0    2 UNDGR   321 B   48    66
                           M   0     0     0  NO. JOINT APPTS        11                              M    0     0
                           D   0     0     0                                                         D    0     0

SYS PROGRAM                A   0     0     0     5    0    0    6     8 FACULTY    0    3 GRAD      4 A    0     0
IN DEPT OF                 B   1     1     1                            OTHER      0    0 UNDGR   180 B   70    75
                           M   1     1     1  NO. JOINT APPTS         1                              M    0     1
                           D   0     0     0                                                         D    0     0
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                                                    SUMMARY BY DEGREE PRCGRAMS

         GROUP (PUBLIC :MASTERS  :10,000-19,999)
                                                      (AS OF JUNE 30, 1977)

PROGRAM NAME                DEGREE LEVEL AND     *******          S T A F F          *******  MAJORS            DEGREES
  AND DEPARTMENT              YEAR OFFERED       FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED          AWARDED
                              76-77 77-78 78-79  TIME RA-S TA-S CTHR  FTE         COMP-SC OTHR 1976 - 1977      76-77 77-78

CEN PROGRAM                 A    0     0     0     3    0    2    0     4 FACULTY    1     2  GRAD      20   A     0     0
IN DEPT OF                  B    1     1     1                            CTHER      0     0  UNDGR     10   B    12    15
                            M    1     1     1  NO. JOINT APPTS         0                                    M     3     5
                            D    0     0     0                                                               D     0     0

CIS PROGRAM                 A    0     0     0     6    0    0    0     6 FACULTY    1     0  GRAD       0   A     0     0
IN DEPT OF                  B    1     1     1                            CTHER      0     2  UNDGR     25   B     0     0
                            M    0     0     0  NC. JOINT APPTS         0                                    M     0     0
                            D    0     0     0                                                               D     0     0

CSC PRCGRAM                 A    0     0     0    99   11   43   70   208 FACULTY   23    65  GRAD     196   A     0     0
IN DEPT OF                  B   15    17    17                            OTHER      0     4  UNDGR   2242   B   410   522
                            M    4     4     4  NO. JOINT APPTS        28                                    M    31    42
                            D    0     0     0                                                               D     0     0

DPR PROGRAM                 A    2     2     2    22    1    2   10    14 FACULTY    1     1  GRAD       0   A    16    24
IN DEPT OF                  B    3     3     3                            CTHER      0     8  UNDGR    571   B    88   116
                            M    0     0     0  NO. JOINT APPTS         4                                    M     0     0
                            D    0     0     0                                                               D     0     0

ICS PROGRAM                 A    0     0     0     5    0    0    6     7 FACULTY    0     4  GRAD       0   A     0     0
IN DEPT CF                  B    1     1     1                            OTHER      0     0  UNDGR    182   B    35    36
                            M    0     0     0  NO. JOINT APPTS         0                                    M     0     0
                            D    0     0     0                                                               D     0     0

ISC PROGRAM                 A    0     0     0     2    0    0    1     3 FACULTY    1     2  GRAD       0   A     0     0
IN DEPT OF                  B    1     1     1                            CTHER      0     0  UNDGR     64   B     7     7
                            M    0     0     0  NO. JOINT APPTS         1                                    M     0     0
                            D    0     0     0                                                               D     0     0

ISY PROGRAM                 A    0     0     0     3    0    0    2     4 FACULTY    0     0  GRAD       0   A     0     0
IN DEPT OF                  B    1     1     1                            OTHER      0     3  UNDGR    120   B    13    26
                            M    0     0     0  NO. JOINT APPTS         1                                    M     0     0
                            D    0     0     0                                                               D     0     0

SCS PROGRAM                 A    0     0     0     9    0    2    4    14 FACULTY    1     5  GRAD       0   A     0     0
IN DEPT OF                  B    1     1     1                            CTHER      0     0  UNDGR    129   B    43    50
                            M    0     0     1  NC. JOINT APPTS         2                                    M     0     0
                            D    0     0     0                                                               D     0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                         UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                  SUMMARY BY DEGREE PROGRAMS
      GROUP (PUBLIC :MASTERS  :20,000 PLUS  )
                                                    (AS OF JUNE 30, 1977)

PROGRAM NAME               DEGREE LEVEL AND    *******          S T A F F          ******* MAJORS          DEGREES
   AND DEPARTMENT            YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED        AWARDED
                            76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE       COMP-SC OTHR  1976 - 1977    76-77 77-78

CSC PROGRAM                A    0     0     0    11    0    0   15  121 FACULTY    6     7 GRAD    139 A     0     0
IN DEPT OF                 B    2     2     2                          OTHER      2     4 UNDGR   713 B   124   136
                           M    2     2     2 NO. JOINT APPTS       0                                  M    32    33
                           D    1     1     1                                                          D     0     1

CSE PROGRAM                A    0     0     0    20    0    0   14   27 FACULTY    0     0 GRAD     30 A     0     0
IN DEPT OF                 B    1     1     1                          OTHER      0     0 UNDGR    90 B    22    40
                           M    1     1     1 NO. JOINT APPTS       0                                  M     9    20
                           D    0     0     0                                                          D     0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                         UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                  SUMMARY BY DEGREE PROGRAMS
      GROUP (PUBLIC :DOCTORATE:500-2499      )
                                                    (AS OF JUNE 30, 1977)

PROGRAM NAME               DEGREE LEVEL AND    *******          S T A F F          ******* MAJORS          DEGREES
   AND DEPARTMENT            YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED        AWARDED
                            76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE       COMP-SC OTHR  1976 - 1977    76-77 77-78

CSC PROGRAM                A    0     0     0     5    0    5    1    6 FACULTY    3     0 GRAD      8 A     0     0
IN DEPT OF                 B    1     1     1                          OTHER      0     0 UNDGR    50 B     8     8
                           M    1     1     1 NO. JOINT APPTS       0                                  M     3     7
                           D    0     0     0                                                          D     0     0

OTH PROGRAM                A    0     0     0     1    0    0    3    2 FACULTY    1     7 GRAD      0 A     0     0
IN DEPT OF                 B    0     0     0                          OTHER      0     7 UNDGR     0 B     0     0
                           M    1     1     1 NO. JOINT APPTS       5                                  M     0     0
                           D    1     1     1                                                          D     0     0
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                                              SUMMARY BY DEGREE PROGRAMS
      GROUP (PUBLIC :DOCTORATE:2500-9999    )
                                                (AS OF JUNE 30, 1977)

PROGRAM NAME              DEGREE LEVEL AND    *******           S T A F F          *******  MAJORS           DEGREES
   AND DEPARTMENT           YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED         AWARDED
                           76-77 77-78 78-79  TIME RA-S TA-S OTHR  FTE       COMP-SC OTHR  1976 - 1977      76-77 77-78

CEN PROGRAM              A   0     0     0      0    0    1    7    3 FACULTY    0    4  GRAD      0  A     0     0
IN DEPT OF               B   1     1     1                            OTHER      0    0  UNDGR     6  B     2     4
                         M   0     0     0  NO. JOINT APPTS         0                                M     0     0
                         D   0     0     0                                                           D     0     0

CPR PROGRAM              A   0     0     0      6    5    3    0    7 FACULTY    3    3  GRAD      0  A     0     0
IN DEPT OF               B   1     1     1                            OTHER      0    0  UNDGR    60  B    14     8
                         M   0     0     1  NO. JOINT APPTS         4                                M     0     0
                         D   0     0     0                                                           D     0     0

CSC PROGRAM              A   0     0     0     53    7   30   55   89 FACULTY   25   19  GRAD    220  A     0     0
IN DEPT OF               B  12    13    13                            OTHER      0    1  UNDGR  1030  B   162   227
                         M   4     5     6  NO. JOINT APPTS         9                                M    44    52
                         D   2     2     2                                                           D     2     3

CSE PROGRAM              A   0     0     0      0   12    0   10    4 FACULTY    7    3  GRAD     50  A     0     0
IN DEPT OF               B   0     0     0                            OTHER      0    0  UNDGR     0  B     0     0
                         M   1     1     1  NO. JOINT APPTS         7                                M    12    15
                         D   0     0     0                                                           D     0     0

CTE PROGRAM              A   1     1     1      2    0    0    0    2 FACULTY    0    0  GRAD      0  A     1     1
IN DEPT OF               B   0     0     0                            OTHER      0    0  UNDGR     5  B     0     0
                         M   0     0     0  NO. JOINT APPTS         0                                M     0     0
                         D   0     0     0                                                           D     0     0

DPR PROGRAM              A   0     0     0      2    0    0    2    2 FACULTY    2    0  GRAD      0  A     0     0
IN DEPT OF               B   1     1     1                            OTHER      0    0  UNDGR   256  B     5    30
                         M   0     0     0  NO. JOINT APPTS         2                                M     0     0
                         D   0     0     0                                                           D     0     0

ICS PROGRAM              A   0     0     0     21    7    2   12   29 FACULTY    3    9  GRAD    147  A     0     0
IN DEPT OF               B   2     2     2                            OTHER      1    1  UNDGR   265  B    49    69
                         M   1     1     1  NO. JOINT APPTS         1                                M    67    56
                         D   1     1     1                                                           D     1     2

ISC PROGRAM              A   0     0     0      6    0    0    6    8 FACULTY    2    7  GRAD      3  A     0     0
IN DEPT OF               B   0     0     0                            OTHER      0    0  UNDGR     0  B     0     0
                         M   1     1     1  NO. JOINT APPTS         6                                M     0     2
                         D   1     1     1                                                           D     3     2

SIS PROGRAM              A   0     0     0      2    0    0    0    2 FACULTY    1    3  GRAD      0  A     0     0
IN DEPT OF               B   1     1     1                            OTHER      0    0  UNDGR   108  B    23    35
                         M   0     0     0  NO. JOINT APPTS         0                                M     0     0
                         D   0     0     0                                                           D     0     0
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                                              SUMMARY BY DEGREE PROGRAMS
      GROUP (PUBLIC :DOCTORATE:10,000-19,999)
                                                (AS OF JUNE 30, 1977)

 PROGRAM NAME          DEGREE LEVEL AND    *******           S T A F F       *******  MAJORS            DEGREES
   AND DEPARTMENT       YEAR OFFERED       FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED          AWARDED
                        76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE        COMP-SC OTHR  1976 - 1977       76-77 77-78

CEA PROGRAM             A  0     0     0     0    0    0    0    0 FACULTY    0    0  GRAD      0   A    0     0
IN DEPT OF              B  1     1     1                           OTHER      0    0  UNDGR     0   B    0     0
                        M  1     1     1  NO. JOINT APPTS          0                                M    0     0
                        D  1     1     1                                                            D    0     0

CSC PROGRAM             A  0     0     0   192   38  100   87  269 FACULTY   75  107  GRAD    515   A    0     0
IN DEPT OF              B 23    24    24                           OTHER      6    5  UNDGR  2726   B  453   605
                        M 16    18    20  NO. JOINT APPTS         97                                M  141   157
                        D  5     5     5                                                            D    6     8

CSE PROGRAM             A  0     0     0    13    1   16   13   21 FACULTY    7    3  GRAD    337   A    0     0
IN DEPT OF              B  1     1     1                           OTHER      0    7  UNDGR   339   B   44    75
                        M  2     2     2  NO. JOINT APPTS          0                                M   66    65
                        D  1     1     1                                                            D    6    10

CST PROGRAM             A  1     1     1     1    0    2    0    2 FACULTY    0    0  GRAD      0   A    5     5
IN DEPT OF              B  0     0     0                           OTHER      0    2  UNDGR    10   B    0     0
                        M  0     0     0  NO. JOINT APPTS          0                                M    0     0
                        D  0     0     0                                                            D    0     0

CTE PROGRAM             A  1     1     1     3    0    0    0    0 FACULTY    0    0  GRAD      0   A   18    20
IN DEPT OF              B  0     0     0                           OTHER      0    0  UNDGR   174   B    0     0
                        M  0     0     0  NO. JOINT APPTS          0                                M    0     0
                        D  0     0     0                                                            D    0     0

DPR PROGRAM             A  1     1     1     8    4   11   10   17 FACULTY    5    5  GRAD      0   A   10    25
IN DEPT OF              B  2     2     2                           OTHER      0    0  UNDGR   241   B   24    40
                        M  0     0     0  NO. JOINT APPTS          6                                M    0     0
                        D  0     0     0                                                            D    0     0

ICS PROGRAM             A  0     0     0    17   10   11   11   32 FACULTY    6    5  GRAD     70   A    0     0
IN DEPT OF              B  1     1     1                           OTHER      0    0  UNDGR   270   B   72    89
                        M  1     1     1  NO. JOINT APPTS          1                                M    3     7
                        D  1     1     1                                                            D    4     2

ISC PROGRAM             A  0     0     0    11    3    8    0   17 FACULTY    5    6  GRAD     19   A    0     0
IN DEPT OF              B  1     1     1                           OTHER      0    0  UNDGR    77   B   20    30
                        M  1     1     1  NO. JOINT APPTS          0                                M    3     6
                        D  1     1     1                                                            D    0     4

ISY PROGRAM             A  1     1     0    28    4   17   20   44 FACULTY   12    9  GRAD     66   A    3    15
IN DEPT OF              B  5     5     5                           OTHER      0    3  UNDGR   505   B   77    90
                        M  2     2     3  NO. JOINT APPTS          2                                M    8    15
                        D  0     0     0                                                            D    0     0

SAN PROGRAM             A  0     0     0    10    0    0    2   11 FACULTY    0    0  GRAD      0   A    0     0
IN DEPT OF              B  1     1     1                           OTHER      0    0  UNDGR   356   B   72    59
                        M  0     0     0  NO. JOINT APPTS          0                                M    0     0
                        D  0     0     0                                                            D    0     0

SCE PROGRAM             A  0     0     0     5    1    3    8    9 FACULTY    5    1  GRAD     20   A    0     0
IN DEPT OF              B  1     1     1                           OTHER      0    0  UNDGR   100   B   18    25
                        M  1     1     1  NO. JOINT APPTS          3                                M   10    20
                        D  0     0     0                                                            D    0     0

SEN PROGRAM             A  0     0     0     5    4    2    3    7 FACULTY    0    6  GRAD     22   A    0     0
IN DEPT OF              B  1     1     1                           OTHER      0    0  UNDGR    85   B   21    20
                        M  2     2     2  NO. JOINT APPTS          0                                M   15    19
                        D  0     0     0                                                            D    0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
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                         UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                             SUMMARY BY DEGREE PROGRAMS

      GROUP (PUBLIC :DOCTORATE:20,000 PLUS  )
                                              (AS OF JUNE 30, 1977)

PROGRAM NAME           DEGREE LEVEL AND      *******        S T A F F          *******  MAJORS             DEGREES
  AND DEPARTMENT         YEAR OFFERED        FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED           AWARDED
                       76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE        COMP-SC OTHR  1976 - 1977        76-77 77-78

CEN PROGRAM           A    0     0     0    40   27   24    0   64 FACULTY   21    13  GRAD     75  A      0     0
IN DEPT OF            B    2     3     4                            OTHER      0     0  UNDGR   349  B     77    83
                      M    1     2     2 NO. JOINT APPTS         1                                   M     16    18
                      D    1     1     2                                                             D      5     6

CIS PROGRAM           A    0     0     0    40   26   46   32   82 FACULTY   24    13  GRAD    236  A      0     0
IN DEPT OF            B    2     2     2                            OTHER      1     0  UNDGR   570  B    118   134
                      M    2     2     2 NO. JOINT APPTS         6                                   M     75    78
                      D    1     1     1                                                             D      5    14

CSC PROGRAM           A    0     0     0   438  259  454  185  735 FACULTY  212   246  GRAD   2563  A      0     0
IN DEPT OF            B   28    32    32                            OTHER      4     3  UNDGR  6254  B   1247  1553.
                      M   30    31    32 NO. JOINT APPTS       120                                   M    560   633
                      D   22    22    24                                                             D    100   130

CSE PROGRAM           A    0     0     0    30   14   13    6   40 FACULTY   11    18  GRAD    258  A      0     0
IN DEPT OF            B    4     4     4                            OTHER      0     0  UNDGR   575  B     96   126
                      M    3     3     3 NO. JOINT APPTS         1                                   M     46    67
                      D    3     3     3                                                             D      7     9

CST PROGRAM           A    0     0     0     1    0    0    4    2 FACULTY    0     5  GRAD      0  A      0     0
IN DEPT OF            B    1     1     1                            OTHER      0     0  UNDGR    57  B      7    10
                      M    0     0     0 NO. JOINT APPTS         0                                   M      0     0
                      D    0     0     0                                                             D      0     0

CTE PROGRAM           A    1     1     1     2    0    0    1    2 FACULTY    0     0  GRAD      0  A      2     2
IN DEPT OF            B    0     0     0                            OTHER      0     0  UNDGR    37  B      0     0
                      M    0     0     0 NO. JOINT APPTS         0                                   M      0     0
                      D    0     0     0                                                             D      0     0

DPR PROGRAM           A    2     2     2    12    0    5    7   14 FACULTY    3     3  GRAD     39  A     87   103
IN DEPT OF            B    1     1     1                            OTHER      0     0  UNDGR   442  B     15    30
                      M    1     1     1 NO. JOINT APPTS         1                                   M     18    20
                      D    1     1     1                                                             D      0     1

ISY PROGRAM           A    0     0     0    44   17   57   10   80 FACULTY   24    12  GRAD    174  A      0     0
IN DEPT OF            B    5     5     5                            OTHER      4     1  UNDGR   327  B     72    91
                      M    3     3     3 NO. JOINT APPTS         3                                   M     53    65
                      D    3     3     3                                                             D      5     7

OTH PROGRAM           A    0     0     0    38   19   28   18   62 FACULTY    3    27  GRAD    133  A      0     0
IN DEPT OF            B    4     4     4                            OTHER      0     0  UNDGR   736  B    114   135
                      M    4     4     4 NO. JOINT APPTS        13                                   M     32    35
                      D    3     3     3                                                             D      2     4

SYS PROGRAM           A    0     0     0     0    0    0  *20    6 FACULTY    3    16  GRAD     26  A      0     0
IN DEPT.OF            B    0     0     0                            OTHER      0     0  UNDGR     0  B      0     0
                      M    1     1     1 NO. JOINT APPTS        20                                   M      2     3
                      D    0     0     0                                                             D      0     0
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                                                SUMMARY BY DEGREE PROGRAMS
       GROUP (PRIVATE:ASSOCIATE:BELOW 500    )
                                                  (AS OF JUNE 30, 1977)

 PROGRAM NAME              DEGREE LEVEL AND    *******         S T A F F        ******* MAJORS          DEGREES
   AND DEPARTMENT            YEAR CFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED        AWARDED
                              76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE        COMP-SC CTHR  1976 - 1977     76-77 77-78

CPR PROGRAM                A    1     1     1     0    0    0    1    1 FACULTY    0     0  GRAD      0  A    0     0
IN DEPT CF                 B    0     0     0                           CTHER      0     0  UNDGR     0  B    0     0
                           M    0     0     0  NO. JOINT APPTS         1                                  M    0     0
                           D    0     0     0                                                             D    0     0

CSC PROGRAM                A    0     0     1     1    0    2    0    2 FACULTY    0     0  GRAD      0  A    0   , 0
IN DEPT CF                 B    0     0     0                           CTHER      0     0  UNDGR    15  B    0     0
                           M    0     0     0  NO. JOINT APPTS         2                                  M    0     0
                           D    0     0     0                                                             D    0     0

DPR PROGRAM                A    2     2     2     2    0    1    3    3 FACULTY    0     0  GRAD      0  A   14    17
IN DEPT OF                 B    0     0     0                           CTHER      0     0  UNDGR    70  B    0     0
                           M    0     0     0  NC. JOINT APPTS         3                                  M    0     0
                           D    0     0     0                                                             D    0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
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                         UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                   SUMMARY BY DEGREE PROGRAMS
     GROUP (PRIVATE:ASSOCIATE:500-2499     )
                                                     (AS OF JUNE 30, 1977)

 PROGRAM NAME            DEGREE LEVEL AND    *******           S T A F F          ******* MAJORS          DEGREES
   AND DEPARTMENT          YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED        AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE       COMP-SC OTHR  1976 - 1977     76-77 77-78

CPR PROGRAM              A   2     2     2     5    0    3    3    8 FACULTY    0    1  GRAD      0  A    72    85
IN DEPT OF               B   0     0     0                           OTHER      0    1  UNDGR   223  B     0     0
                         M   0     0     0  NO. JOINT APPTS        2                                 M     0     0
                         D   0     0     0                                                           D     0     0

CST PROGRAM              A   1     1     1     3    0    0    0    3 FACULTY    0    0  GRAD      0  A     7    10
IN DEPT OF               B   0     0     0                           OTHER      0    0  UNDGR    30  B     0     0
                         M   0     0     0  NO. JOINT APPTS        0                                 M     0     0
                         D   0     0     0                                                           D     0     0

DPR PROGRAM              A   1     1     1     2    0    5    0    4 FACULTY    0    0  GRAD      0  A    22    25
IN DEPT OF               B   0     0     0                           OTHER      0    0  UNDGR    70  B     0     0
                         M   0     0     0  NO. JOINT APPTS        1                                 M     0     0
                         D   0     0     0                                                           D     0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                         UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                   SUMMARY BY DEGREE PROGRAMS
     GROUP (PRIVATE:ASSOCIATE:2500-9999    )
                                                     (AS OF JUNE 30, 1977)

 PROGRAM NAME            DEGREE LEVEL AND    *******           S T A F F          ******* MAJORS          DEGREES
   AND DEPARTMENT          YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED        AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE       COMP-SC OTHR  1976 - 1977     76-77 77-78

DPR PROGRAM              A   1     1     1     0    0    2    0    1 FACULTY    0    0  GRAD      0  A     5     6
IN DEPT OF               B   0     0     0                           OTHER      0    0  UNDGR    24  B     0     0
                         M   0     0     0  NO. JOINT APPTS        0                                 M     0     0
                         D   0     0     0                                                           D     0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                    SUMMARY BY DEGREE PROGRAMS
      GROUP (PRIVATE:BACHELORS:BELOW 500     )
                                                      (AS OF JUNE 30, 1977)

 PROGRAM NAME               DEGREE LEVEL AND    *******        S T A F F          ******* MAJORS           DEGREES
   AND DEPARTMENT             YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED        AWARDED
                             76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE        COMP-SC OTHR 1976 - 1977     76-77 77-78

CSC PROGRAM                 A   1     1     1    1    1    2    0    3 FACULTY    0     0  GRAD      0  A    0     0
IN DEPT OF                  B   0     0     0                          OTHER      0     0  UNDGR     0  B    0     0
                            M   0     0     0  NO. JOINT APPTS       1                                  M    0     0
                            D   0     0     0                                                           D    0     0

OTH PROGRAM                 A   0     0     0    2    0    0    0    2 FACULTY    0     2  GRAD      0  A    0     0
IN DEPT OF                  B   0     0     1                          OTHER      0     0  UNDGR     0  B    0     0
                            M   0     0     0  NO. JOINT APPTS       0                                  M    0     0
                            D   0     0     0                                                           D    0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                    SUMMARY BY DEGREE PROGRAMS
      GROUP (PRIVATE:BACHELORS:500-2499      )
                                                      (AS OF JUNE 30, 1977)

 PROGRAM NAME               DEGREE LEVEL AND    *******        S T A F F          ******* MAJORS           DEGREES
   AND DEPARTMENT             YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED        AWARDED
                             76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE        COMP-SC OTHR 1976 - 1977     76-77 77-78

CPR PROGRAM                 A   2     2     2    4    0    0    3    5 FACULTY    0     0  GRAD      0  A    9    14
IN DEPT OF                  B   1     1     1                          OTHER      0     0  UNDGR    76  B    9    12
                            M   0     0     0  NO. JOINT APPTS       0                                  M    0     0
                            D   0     0     0                                                           D    0     0

CSC PROGRAM                 A   8     8     8   31    2    5   29   44 FACULTY    6    28  GRAD      6  A   13    25
IN DEPT OF                  B  16    17    17                          OTHER      0     1  UNDGR   331  B   61    83
                            M   0     0     0  NO. JOINT APPTS      38                                  M    0     0
                            D   0     0     0                                                           D    0     0

DPR PROGRAM                 A   2     2     2    6    0    0    2    7 FACULTY    0     0  GRAD      0  A    6     8
IN DEPT OF                  B   2     2     2                          OTHER      0     0  UNDGR    82  B   19    25
                            M   0     0     0  NO. JOINT APPTS       3                                  M    0     0
                            D   0     0     0                                                           D    0     0

ISC PROGRAM                 A   1     1     1    1    0    3    1    2 FACULTY    0     1  GRAD      0  A    0     0
IN DEPT OF                  B   1     1     1                          OTHER      0     0  UNDGR     4  B    0     1
                            M   0     0     0  NO. JOINT APPTS       1                                  M    0     0
                            D   0     0     0                                                           D    0     0

ISY PROGRAM                 A   1     1     1    2    0    0    4    3 FACULTY    0     0  GRAD      0  A    2     2
IN DEPT OF                  B   1     1     1                          OTHER      0     0  UNDGR    70  B   18    15
                            M   0     0     0  NO. JOINT APPTS       0                                  M    0     0
                            D   0     0     0                                                           D    0     0

OTH PROGRAM                 A   0     0     0   16    0    4    4   19 FACULTY    0    12  GRAD      0  A    0     0
IN DEPT OF                  B   5     5     5                          OTHER      0     2  UNDGR    49  B   17    22
                            M   0     0     0  NO. JOINT APPTS       1                                  M    0     0
                            D   0     0     0                                                           D    0     0
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     INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PRCGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                     CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSCURI-ROLLA
                                  UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                     SUMMARY BY CEGREE PROGRAMS
          GROUP (PRIVATE:BACHELCRS:2500-9999    )
                                                      (AS OF JUNE 30, 1977)

   PROGRAM NAME            CEGREE LEVEL AND    *******             S T A F F         ******* MAJORS           DEGREES
      AND DEPARTMENT         YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED         AWARDED
                             76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE       COMP-SC OTHR 1976 - 1977      76-77 77-78

  CSC PRCGRAM              A   2     2     2     3    0   15    8   12 FACULTY    3    4 GRAD      0 A    32    32
  IN DEPT OF               B   0     2     2                            OTHER      0    0 UNDGR   120 B     0     3
                           M   0     0     0   NO. JOINT APPTS       1                                  M     0     0
                           D   0     0     0                                                            D     0     0

  DPR PROGRAM              A   1     1     1     1    0    0    5    4 FACULTY    0    0 GRAD      0 A     3     5
  IN DEPT OF               B   1     1     1                            CTHER      0    0 UNDGR   125 B    10    10
                           M   0     0     0   NO. JCINT APPTS       0                                  M     0     0
                           D   0     0     0                                                            D     0     0

  ISY PROGRAM              A   0     0     0     2    0    0    3    4 FACULTY    0    0 GRAD      0 A     0     0
  IN DEPT OF               B   1     1     1                            OTHER      0    0 UNDGR    38 B    64    12
                           M   0     0     0   NO. JOINT APPTS       0                                  M     0     0
                           D   0     0     0                                                            D     0     0

  OTH PROGRAM              A   0     C     0     2    0    0    2    3 FACULTY    0    1 GRAD      0 A     0     0
  IN DEPT OF               B   1     1     1                            CTHER      0    0 UNDGR     0 B     0     4
                           M   0     0     0   NO. JOINT APPTS       0                                  M     0     0
                           D   0     0     0                                                            D     0     0
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     INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, ANC INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                     CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSCURI-ROLLA
                                  UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                     SUMMARY BY CEGREE PROGRAMS
          GROUP (PRIVATE:MASTERS  :500-2499     )
                                                      (AS OF JUNE 30, 1977)

   PROGRAM NAME            CEGREE LEVEL AND    *******             S T A F F         ******* MAJORS           DEGREES
      AND DEPARTMENT         YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLEL         AWARDED
                             76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE       COMP-SC OTHR 1976 - 1977      76-77 77-78

  CSC PRCGRAM              A   3     3     3    18    0    9   15   30 FACULTY    4   14 GRAD     20 A     4     5
  IN DEPT OF               B  10    11    11                            OTHER      0    0 UNDGR   358 B    60    88
                           M   1     1     1   NO. JOINT APPTS      10                                  M     0     0
                           D   0     0     0                                                            D     0     0

  DPR PROGRAM              A   0     0     0     5    0    0    3    8 FACULTY    0    0 GRAD      0 A     0     0
  IN DEPT OF               B   2     2     2                            CTHER      0    0 UNDGR    25 B     3     7
                           M   0     0     0   NO. JCINT APPTS       0                                  M     0     0
                           D   0     0     0                                                            D     0     0

  ICS PROGRAM              A   1     1     1     1    0    0    5    2 FACULTY    1    1 GRAD      0 A     2     5
  IN DEPT OF               B   1     1     1                            OTHER      0    0 UNDGR    75 B    10    15
                           M   0     0     0   NO. JOINT APPTS       2                                  M     0     0
                           D   0     0     0                                                            D     0     0

  ISC PROGRAM              A   0     0     0     4    0    0    4    6 FACULTY    0    4 GRAD      0 A     0     0
  IN DEPT OF               B   1     2     2                            OTHER      0    0 UNDGR     0 B     0     0
                           M   0     0     0   NC. JOINT APPTS       2                                  M     0     0
                           D   0     0     0                                                            D     0     0

  OTH PROGRAM              A   1     1     1    23    0    5    7   23 FACULTY    0   19 GRAD      0 A     2     4
  IN DEPT OF               B   5     6     6                            CTHER      0    0 UNDGR   128 B    26    37
                           M   0     0     0   NO. JOINT APPTS       1                                  M     0     0
                           D   0     0     0                                                            D     0     0
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                                                        SUMMARY BY DEGREE PROGRAMS
         GROUP (PRIVATE:MASTERS  12500-9999    )
                                                          (AS OF JUNE 30, 1977)

  PROGRAM NAME              DEGREE LEVEL AND    *******          S T A F F         *******  MAJORS          DEGREES
     AND DEPARTMENT           YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED        AWARDED
                           76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE        COMP-SC OTHR  1976 - 1977     76-77 77-78

CIS PROGRAM               A   1     1     1     3    0    0    0    3 FACULTY    1     0  GRAD      0  A     0    10
IN DEPT OF                B   1     1     1                          OTHER      0     0  UNDGR    75  B     6    20
                          M   0     0     0  NO. JOINT APPTS         0                                M     0     0
                          D   0     0     0                                                           D     0     0

CPR PROGRAM               A   0     0     0     2    0    0    0    2 FACULTY    0     2  GRAD      0  A     0     0
IN DEPT OF                B   1     1     1                          OTHER      0     0  UNDGR    10  B     0     5
                          M   0     0     0  NO. JOINT APPTS         2                                M     0     0
                          D   0     0     0                                                           D     0     0

CSC PROGRAM               A   4     4     4    52    3    5   31   65 FACULTY   12    28  GRAD     41  A     8    11
IN DEPT OF                B  15    16    16                          OTHER      5     0  UNDGR   678  B   143   174
                          M   2     3     3  NO. JOINT APPTS        24                                M     5     6
                          D   0     0     0                                                           D     0     0

CST PROGRAM               A   0     0     0    10    5    4    0   22 FACULTY    1     3  GRAD     40  A     0     0
IN DEPT OF                B   1     1     1                          OTHER      8     0  UNDGR    37  B     5    37
                          M   1     1     1  NO. JOINT APPTS         3                                M    15    40
                          D   0     0     0                                                           D     0     0

CTE PROGRAM               A   1     1     1     0    0    6    0    3 FACULTY    0     0  GRAD      0  A     2     4
IN DEPT OF                B   0     0     0                          OTHER      0     0  UNDGR    10  B     0     0
                          M   0     0     0  NO. JOINT APPTS         2                                M     0     0
                          D   0     0     0                                                           D     0     0

DPR PROGRAM               A   1     1     1     0    0    0    5    3 FACULTY    0     0  GRAD      0  A     0     2
IN DEPT OF                B   1     1     1                          OTHER      0     0  UNDGR    72  B     9    11
                          M   0     0     0  NO. JOINT APPTS         0                                M     0     0
                          D   0     0     0                                                           D     0     0

ISY PROGRAM               A   1     1     1    15    0    0   11   19 FACULTY    4     2  GRAD     89  A     5     5
IN DEPT OF                B   3     3     3                          OTHER      0     0  UNDGR   296  B    45    54
                          M   1     1     2  NO. JOINT APPTS         2                                M    10    11
                          D   0     0     0                                                           D     0     0

OTH PROGRAM               A   0     0     0    13    0    0    1   13 FACULTY    2     6  GRAD      0  A     0     0
IN DEPT OF                B   1     2     2                          OTHER      0     0  UNDGR   140  B    28    53
                          M   0     0     0  NO. JOINT APPTS         0                                M     0     0
                          D   0     0     0                                                           D     0     0
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                                                   SUMMARY BY DEGREE PROGRAMS
      GROUP (PRIVATE:MASTERS  $10,000-19,999)
                                                   (AS OF JUNE 30, 1977)

PROGRAM NAME               DEGREE LEVEL AND    *******             S T A F F         *******  MAJORS             DEGREES
  AND DEPARTMENT             YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES ***    ENROLLED           AWARDED
                             76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE        COMP-SC OTHR   1976 - 1977        76-77 77-78

CSC PROGRAM                A   0     0     0    25    1   12   29   36 FACULTY    6     8   GRAD    200  A      0     0
IN DEPT OF                 B   3     3     3                           OTHER      0     0   UNDGR   667  B     85   100
                           M   2     2     2   NO. JOINT APPTS       7                                   M     43    57
                           D   0     0     0                                                             D      0     0

NEC PROGRAM                A   0     0     0     6    0    2    2    8 FACULTY    0     0   GRAD     62  A      0     0
IN DEPT OF                 B   0     0     0                           OTHER      0     0   UNDGR     0  B      0     0
                           M   1     1     1   NO. JOINT APPTS       0                                   M     31    20
                           D   0     0     0                                                             D      0     0
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 INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                     CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                  PAGE IX-69

                                                               SUMMARY BY DEGREE PROGRAMS
       GROUP (PRIVATE:DOCTORATE:500-2499      )
                                                               (AS OF JUNE 30, 1977)

 PROGRAM NAME              DEGREE LEVEL AND    *******             S T A F F          *******  MAJORS          DEGREES
    AND DEPARTMENT           YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED        AWARDED
                            76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE       COMP-SC OTHR  1976 - 1977     76-77 77-78

OTH PROGRAM                A    0     0     0    9    8    6    6   15 FACULTY    8     5  GRAD     62  A    0     0
IN DEPT OF                 B    1     1     1                          OTHER      1     0  UNDGR    19  B    6     6
                           M    2     2     2  NO. JOINT APPTS       2                                  M   30    29
                           D    2     2     2                                                           D    0     3
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 INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                     CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                              UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                               SUMMARY BY DEGREE PROGRAMS
       GROUP (PRIVATE:DOCTORATE:2500-9999     )
                                                               (AS OF JUNE 30, 1977)

 PROGRAM NAME              DEGREE LEVEL AND    *******             S T A F F          *******  MAJORS          DEGREES
    AND DEPARTMENT           YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED        AWARDED
                            76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE       COMP-SC OTHR  1976 - 1977     76-77 77-78

CEA PROGRAM                A    0     0     0    8   15   11    0   34 FACULTY    7     1  GRAD     60  A    0     0
IN DEPT OF                 B    1     1     1                          OTHER      0     0  UNDGR   115  B   24    20
                           M    1     1     1  NO. JOINT APPTS       0                                  M    9     6
                           D    1     1     1                                                           D    3     3

CSC PROGRAM                A    0     0     0  104   33   58   83  152 FACULTY   44    57  GRAD    990  A    0     0
IN DEPT OF                 B   15    16    16                          OTHER      4    18  UNDGR  1150  B  173   214
                           M   12    13    13  NO. JOINT APPTS      36                                  M  136   174
                           D    6     7     7                                                           D    2     9

CSE PROGRAM                A    0     0     0   47    0    0    3   50 FACULTY    5    25  GRAD     50  A    0     0
IN DEPT OF                 B    2     2     2                          OTHER      0     4  UNDGR   106  B   23    24
                           M    1     1     1  NO. JOINT APPTS       3                                  M    9    15
                           D    1     1     1                                                           D    3     5

ISC PROGRAM                A    0     0     0   12    5    1   40   26 FACULTY    2     2  GRAD    316  A    0     0
IN DEPT OF                 B    0     1     1                          OTHER      0     0  UNDGR    20  B    0     5
                           M    1     1     1  NO. JOINT APPTS       0                                  M  122   130
                           D    0     0     0                                                           D    0     0

ISY PROGRAM                A    0     0     0    4    0    5    8    1 FACULTY    0     0  GRAD      0  A    0     0
IN DEPT OF                 B    1     1     1                          OTHER      0     0  UNDGR    37  B    3     4
                           M    1     1     1  NO. JOINT APPTS       1                                  M    0     0
                           D    1     1     1                                                           D    0     0

OTH PROGRAM                A    0     0     0    4    0    0    3    5 FACULTY    1     1  GRAD     20  A    0     0
IN DEPT OF                 B    0     0     2                          OTHER      0     0  UNDGR     0  B    0     0
                           M    0     0     1  NO. JOINT APPTS       0                                  M    0     0
                           D    0     0     0                                                           D    0     0

SIS PROGRAM                A    0     0     0    6    2   12   10    8 FACULTY    4     2  GRAD     25  A    0     0
IN DEPT OF                 B    1     1     1                          OTHER      0     0  UNDGR   100  B   30    35
                           M    1     1     1  NO. JOINT APPTS       2                                  M    3     3
                           D    1     1     1                                                           D    2     2
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                   CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                               UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                     SUMMARY BY DEGREE PROGRAMS
     GROUP (PRIVATE:DOCTORATE:10,000-19,999)
                                                       (AS OF JUNE 30, 1977)

  PROGRAM NAME            DEGREE LEVEL AND    *******          S T A F F        ******* MAJORS          DEGREES
    AND DEPARTMENT          YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED        AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE        COMP-SC CTHR  1976 - 1977     76-77 77-78

CSC PROGRAM               A   1     1     1   50   71   45   33   97 FACULTY   11    49 GRAD    288  A     1     5
IN DEPT OF                B   5     5     5                          OTHER     10    22 UNDGR   420  B    96   115
                          M   3     3     3 NO. JOINT APPTS        19                                 M    60    67
                          D   2     2     2                                                           D    23    28

CSE PROGRAM               A   0     0     0    7    9    4    3   15 FACULTY    0     5 GRAD     29  A     0     0
IN DEPT OF                B   1     1     1                          OTHER      0     0 UNDGR    55  B    22    34
                          M   1     1     1 NO. JOINT APPTS         1                                 M     4     5
                          D   1     1     1                                                           D     2     2

ISY PROGRAM               A   0     0     0   15    1    4    5   18 FACULTY    6    10 GRAD    102  A     0     0
IN DEPT OF                B   1     1     1                          OTHER      2     0 UNDGR    47  B    16    15
                          M   1     1     1 NO. JOINT APPTS         5                                 M    37    40
                          D   1     1     1                                                           D     8     8

OTH PROGRAM               A   0     0     0   22    5   21    7   30 FACULTY    9    15 GRAD    140  A     0     0
IN DEPT OF                B   2     2     2                          OTHER      0     0 UNDGR    75  B    15    12
                          M   2     2     2 NO. JOINT APPTS        10                                 M    26    25
                          D   1     1     1                                                           D     1     4
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                   CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                               UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                     SUMMARY BY DEGREE PROGRAMS
     GROUP (PRIVATE:DOCTORATE:20,000 PLUS   )
                                                       (AS OF JUNE 30, 1977)

  PROGRAM NAME            DEGREE LEVEL AND    *******          S T A F F        ******* MAJORS          DEGREES
    AND DEPARTMENT          YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED        AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE        COMP-SC CTHR  1976 - 1977     76-77 77-78

CEN PROGRAM               A   0     0     0    6    0    4    0    0 FACULTY    0     8 GRAD     30  A     0     0
IN DEPT OF                B   1     1     1                          OTHER      0     0 UNDGR   100  B    10    15
                          M   1     1     1 NO. JOINT APPTS         1                                 M     3    15
                          D   0     0     0                                                           D     0     0

CSC PROGRAM               A   0     0     0   12    4   12    8   24 FACULTY   10     0 GRAD    165  A     0     0
IN DEPT OF                B   2     2     2                          OTHER      7     0 UNDGR   215  B    20    35
                          M   2     2     2 NO. JOINT APPTS         9                                 M    27    33
                          D   2     2     2                                                           D     2     6

OTH PROGRAM               A   0     0     0    3   17    1   35   25 FACULTY    0     7 GRAD     18  A     0     0
IN DEPT OF                B   1     1     1                          OTHER      0    11 UNDGR    15  B     0     0
                          M   0     0     0 NO. JOINT APPTS         6                                 M     0     0
                          D   1     1     1                                                           D     5     4
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                                            SUMMARY BY DEGREE PROGRAMS
     GROUP (        :ASSOCIATE:            )
                                            (AS OF JUNE 30, 1977)

  PROGRAM NAME               DEGREE LEVEL AND    *******          S T A F F          *******  MAJORS          DEGREES
     AND DEPARTMENT           YEAR OFFERED       FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED        AWARDED
                            76-77 77-78 78-79 TIME RA-S TA-S OTHR  FTE      COMP-SC OTHR  1976 - 1977     76-77 77-78

 BAD PROGRAM               A    1     1     1     0    0    0    1    1 FACULTY    0    0  GRAD      0  A    0     0
 IN DEPT OF                B    0     0     0                           OTHER      0    0  UNDGR     0  B    0     0
                           M    0     0     0  NO. JOINT APPTS        0                                 M    0     0
                           D    0     0     0                                                           D    0     0

 CPR PROGRAM               A   31    32    32    81    0   30   78  117 FACULTY    1    3  GRAD      0  A  568   655  ✓
 IN DEPT OF                B    0     0     0                           OTHER      0    1  UNDGR  3666  B    0     6
                           M    0     0     0  NO. JOINT APPTS        8                                 M    0     0
                           D    0     0     0                                                           D    0     0

 CSC PROGRAM               A   32    32    33    84    3   21   74  118 FACULTY    0   10  GRAD      0  A  486   543  ✓
 IN DEPT OF                B    0     0     0                           OTHER      1    1  UNDGR  2205  B    0     0
                           M    0     0     0  NO. JOINT APPTS       19                                 M    0     0
                           D    0     0     0                                                           D    0     0

 CSE PROGRAM               A    1     1     1     1    0    0    2    2 FACULTY    0    0  GRAD      0  A    5     5
 IN DEPT OF                B    0     0     0                           OTHER      0    2  UNDGR    15  B    0     0
                           M    0     0     0  NO. JOINT APPTS        1                                 M    0     0
                           D    0     0     0                                                           D    0     0

 CST PROGRAM               A    5     5     5    12    0    2    2   14 FACULTY    0    0  GRAD      0  A   47    81
 IN DEPT OF                B    0     0     0                           OTHER      0    0  UNDGR   225  B    0     0
                           M    0     0     0  NO. JOINT APPTS        0                                 M    0     0
                           D    0     0     0                                                           D    0     0

 CTE PROGRAM               A    7     7     7    13    0    3   21   21 FACULTY    0    0  GRAD      0  A   87   149
 IN DEPT OF                B    0     0     0                           OTHER      0    0  UNDGR   943  B    0     0
                           M    0     0     0  NO. JOINT APPTS        2                                 M    0     0
                           D    0     0     0                                                           D    0     0

 DPR PROGRAM               A  158   161   162   449   19  232  468  998 FACULTY   14   12  GRAD      2  A 2859  3474  ✓
 IN DEPT OF                B    0     0     0                           OTHER      5    0  UNDGR 18426  B    0    80
                           M    0     0     0  NO. JOINT APPTS       75                                 M    0     0
                           D    0     0     0                                                           D    3     0

 EDP PROGRAM               A    1     1     1     1    0    0    6    3 FACULTY    0    0  GRAD      0  A    0     0
 IN DEPT OF                B    0     0     0                           OTHER      0    0  UNDGR    15  B    0     0
                           M    0     0     0  NO. JOINT APPTS        0                                 M    0     0
                           D    0     0     0                                                           D    0     0

 ICS PROGRAM               A    1     1     1     4    0    0    0    4 FACULTY    0    0  GRAD      0  A   16    20
 IN DEPT OF                B    0     0     0                           OTHER      0    0  UNDGR    36  B    0     0
                           M    0     0     0  NO. JOINT APPTS        0                                 M    0     0
                           D    0     0     0                                                           D    0     0

 IPR PROGRAM               A    1     1     1    11    0    0    0   11 FACULTY    0    0  GRAD      0  A   19    19
 IN DEPT OF                B    0     0     0                           OTHER      0    0  UNDGR   245  B    0     0
                           M    0     0     0  NO. JOINT APPTS        0                                 M    0     0
                           D    0     0     0                                                           D    0     0

 ISV PROGRAM               A    1     1     1     6    0    0   15   12 FACULTY    0    0  GRAD      0  A   65    72
 IN DEPT OF                B    0     0     0                           OTHER      0    0  UNDGR   358  B    0     0
                           M    0     0     0  NO. JOINT APPTS        3                                 M    0     0
                           D    0     0     0                                                           D    0     0

 OTH PROGRAM               A   11    11    11    26    0   12   19   69 FACULTY    1    1  GRAD      0  A   85    98
 IN DEPT OF                B    0     0     0                           OTHER      2    0  UNDGR   712  B    0     0
                           M    0     0     0  NO. JOINT APPTS        1                                 M    0     0
                           D    0     0     0                                                           D    0     0
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                   PAGE IX-72

                                                           SUMMARY BY DEGREE PROGRAMS
        GROUP (       :BACHELORS:             )
                                                            (AS OF JUNE 30, 1977)

 PROGRAM NAME             DEGREE LEVEL AND    *******          S T A F F        ******* MAJORS          DEGREES
    AND DEPARTMENT          YEAR OFFERED      FULL **PART  TIME**  TOT *** DOCTORATES *** ENROLLED        AWARDED
                          76-77 77-78 78-79 TIME RA-S TA-S CTHR  FTE      COMP-SC OTHR  1976 - 1977     76-77 77-78

CPR PROGRAM               A    3    3    3     4    0    0    3    5 FACULTY    0    2  GRAD      0  A    11    16
IN DEPT OF                B    1    1    1                            OTHER    0    0  UNDGR    80  B     9    12
                          M    0    0    0  NO. JOINT APPTS          5                                M     0     0
                          D    0    0    0                                                            D     0     0

CSC PROGRAM               A   14   14   14    45    3   22   58   76 FACULTY   13   39  GRAD      6  A    85   106
IN DEPT OF                B   20   24   24                            OTHER    0    1  UNDGR   853  B   101   138
                          M    0    0    0  NO. JOINT APPTS         46                                M     0     0
                          D    0    0    0                                                            D     0     0

CST PROGRAM               A    2    2    2     8    0    0    0    8 FACULTY    0    0  GRAD      0  A    33    38
IN DEPT OF                B    1    1    1                            OTHER    0    0  UNDGR   122  B    10    18
                          M    0    0    0  NO. JOINT APPTS          0                                M     0     0
                          D    0    0    0                                                            D     0     0

DPR PROGRAM               A    8    8    8    20    0    5   16   28 FACULTY    0    1  GRAD      0  A    40    55
IN DEPT OF                B    6    6    6                            OTHER    1    0  UNDGR   522  B    71    92
                          M    0    0    0  NO. JOINT APPTS          9                                M     0     0
                          D    0    0    0                                                            D     0     0

ISC PROGRAM               A    1    1    1    12    8    3    1   15 FACULTY    1    1  GRAD      0  A     0     0
IN DEPT OF                B    3    3    3                            OTHER    0    0  UNDGR    79  B    33    51
                          M    0    0    0  NO. JOINT APPTS          1                                M     0     0
                          D    0    0    0                                                            D     0     0

ISY PROGRAM               A    1    1    1     4    0    0    7    7 FACULTY    0    0  GRAD      0  A     2     2
IN DEPT OF                B    2    2    2                            OTHER    0    0  UNDGR   108  B    82    27
                          M    0    0    0  NO. JOINT APPTS          0                                M     0     0
                          D    0    0    0                                                            D     0     0

MSC PROGRAM               A    0    0    0    12    0    0    0   12 FACULTY    0    0  GRAD      0  A     0     0
IN DEPT OF                B    1    1    1                            OTHER    2    0  UNDGR   100  B    21    19
                          M    0    0    0  NO. JOINT APPTS          0                                M     0     0
                          D    0    0    0                                                            D     0     0

OTH PROGRAM               A    2    2    1    38    0    4    7   43 FACULTY    0   18  GRAD      0  A    37    57
IN DEPT OF                B    9    9   11                            OTHER    0    2  UNDGR   485  B    27    47
                          M    0    0    0  NO. JOINT APPTS          1                                M     0     0
                          D    0    0    0                                                            D     0     0
        INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                      CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                                 UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                      SUMMARY BY DEGREE PROGRAMS
     GROUP (       :MASTERS  :            )
                                                       (AS OF JUNE 30, 1977)

PROGRAM NAME            DEGREE LEVEL AND   *******            S T A F F          *******  MAJORS            DEGREES
  AND DEPARTMENT          YEAR OFFERED     FULL **PART  TIME**  TOT *** DOCTORATES ***  ENROLLED          AWARDED
                        76-77 77-78 78-79  TIME RA-S TA-S OTHR  FTE        COMP-SC OTHR 1976 - 1977       76-77 77-78

CEN PROGRAM             A    1     1     1     6    1    4    6    9 FACULTY     3    4  GRAD    40  A     8     8
IN DEPT OF              B    1     1     1                           OTHER       0    0  UNDGR   26  B    12    15
                        M    2     2     2  NO. JOINT APPTS        4                                 M    15    17
                                                                                                     D     0     0
                        D    0     0     0

CIS PROGRAM             A    2     2     2    10    0    2    0   10 FACULTY     2    0  GRAD     0  A     0    10
IN DEPT OF              B    3     3     3                           OTHER       0    2  UNDGR  100  B     6    20
                        M    0     0     0  NO. JOINT APPTS        0                                 M     0     0
                        D    0     0     0                                                           D     0     0

CPR PROGRAM             A    2     2     2     8    0    1   23   14 FACULTY     1    4  GRAD     0  A    12    20
IN DEPT OF              B    2     2     2                           OTHER       0    0  UNDGR  297  B    12    16
                        M    0     0     0  NO. JOINT APPTS        2                                 M     0     0
                        D    0     0     0                                                           D     0     0

CSC PROGRAM     ✓       A   16    16    16   321   21   75  225  683 FACULTY   100  169  GRAD   770  A    75   107
IN DEPT OF              B   75    80    82                           OTHER       9   31  UNDGR 7685  B  1157  1432
                        M   13    15    16  NO. JOINT APPTS       96                                 M   115   151
                        D    1     1     1                                                           D     0     1

CSE PROGRAM             A    0     0     0    20    0    0   14   27 FACULTY     0    0  GRAD    30  A     0     0
IN DEPT OF              B    1     1     1                           OTHER       0    0  UNDGR   90  B    22    40
                        M    1     1     1  NO. JOINT APPTS        0                                 M     9    20
                        D    0     0     0                                                           D     0     0

CST PROGRAM             A    1     1     1    11    5    4    7   25 FACULTY     1    6  GRAD    40  A     0    16
IN DEPT OF              B    1     1     1                           OTHER       8    0  UNDGR   61  B     5    37
                        M    1     1     1  NO. JOINT APPTS        5                                 M    15    40
                        D    0     0     0                                                           D     0     0

CTE PROGRAM             A    2     2     2     6    0    9   10   18 FACULTY     0    2  GRAD     0  A    41    41
IN DEPT OF              B    1     1     1                           OTHER       0    2  UNDGR  630  B     9     7
                        M    0     0     0  NO. JOINT APPTS        2                                 M     0     0
                        D    0     0     0                                                           D     0     0

DPR PROGRAM     ✓       A   10    11    11    67    1    6   60   81 FACULTY     4   12  GRAD     7  A    62   105
IN DEPT OF              B   17    17    17                           OTHER       0   15  UNDGR 2157  B   265   347
                        M    1     1     1  NO. JOINT APPTS       17                                 M     0     1
                        D    0     0     0                                                           D     0     0

ICS PROGRAM             A    1     1     1     6    0    0   11    9 FACULTY     1    5  GRAD     0  A     2     5
IN DEPT OF              B    2     2     2                           OTHER       0    0  UNDGR  257  B    45    51
                        M    0     0     0  NO. JOINT APPTS        2                                 M     0     0
                        D    0     0     0                                                           D     0     0

IPR PROGRAM             A    0     0     0     3    0    0    1    5 FACULTY     0    0  GRAD     0  A     0     0
IN DEPT OF              B    1     1     1                           OTHER       0    1  UNDGR   90  B     5    15
                        M    0     0     0  NO. JOINT APPTS        0                                 M     0     0
                        D    0     0     0                                                           D     0     0

ISC PROGRAM             A    0     0     0    12    0    1    6   15 FACULTY     3    8  GRAD     0  A     0     0
IN DEPT OF              B    4     5     5                           OTHER       0    0  UNDGR  158  B    25    23
                        M    0     0     0  NO. JOINT APPTS        4                                 M     0     0
                        D    0     0     0                                                           D     0     0

ISY PROGRAM     ✓       A    3     3     3    44    0    2   19   53 FACULTY     9   18  GRAD    89  A     6    10
IN DEPT OF              B   10    10    10                           OTHER       0    3  UNDGR  870  B   140   205
                        M    1     1     2  NO. JOINT APPTS        3                                 M    10    11
                        D    0     0     0                                                           D     0     0

NEC PROGRAM             A    0     0     0     6    0    2    2    8 FACULTY     0    0  GRAD    62  A     0     0
IN DEPT OF              B    0     0     0                           OTHER       0    0  UNDGR    0  B     0     0
                        M    1     1     1  NO. JOINT APPTS        0                                 M    31    20
                        D    0     0     0                                                           D     0     0

OTH PROGRAM             A    1     1     1    59    2    6   20   65 FACULTY     5   42  GRAD     0  A     2     4
IN DEPT OF              B   14    16    16                           OTHER       0    2  UNDGR  585  B   102   156
                        M    0     0     0  NO. JOINT APPTS       12                                 M     0     0
                        D    0     0     0                                                           D     0     0

SAN PROGRAM             A    1     1     1     2    0    0    0    2 FACULTY     0    0  GRAD     0  A     5     5
IN DEPT OF              B    0     0     0                           OTHER       0    0  UNDGR   20  B     0     0
                        M    0     0     0  NO. JOINT APPTS        0                                 M     0     0
                        D    0     0     0                                                           D     0     0

SCS PROGRAM             A    0     0     0     9    0    2    4   14 FACULTY     1    5  GRAD     0  A     0     0
IN DEPT OF              B    1     1     1                           OTHER       0    0  UNDGR  129  B    43    50
                        M    0     0     1  NO. JOINT APPTS        2                                 M     0     0
                        D    0     0     0                                                           D     0     0

SYS PROGRAM             A    0     0     0     5    0    0    6    8 FACULTY     0    3  GRAD     4  A     0     0
IN DEPT OF              B    1     1     1                           OTHER       0    0  UNDGR  180  B    70    75
                        M    1     1     1  NO. JOINT APPTS        1                                 M     0     1
                        D    0     0     0                                                           D     0     0
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                                                         SUMMARY BY DEGREE PROGRAMS
      GROUP I        (DOCTORATE)            )
                                                          (AS OF JUNE 30, 1977)

PROGRAM NAME                    DEGREE LEVEL AND     *******          S T A F F          *******  MAJORS          DEGREES
   AND DEPARTMENT                 YEAR OFFERED       FULL **PART. TIME** TOT *** DOCTORATES ***   ENROLLED        AWARDED
                               76-77 77-78 78-79  TIME RA-S TA-S OTHR  FTE      COMP-SC OTHR    1976 - 1977      76-77 77-78

CEN PROGRAM                     A    0     0     0    54   42   40    7  101 FACULTY  28   26  GRAD    165  A     0     0
IN DEPT OF                      B    6     7     8                             OTHER    0    0  UNDGR   570  B   113   122
                                M    4     5     5  NO. JOINT APPTS        2                                M    28    39
                                D    3     3     4                                                          D     8     9

CIS PROGRAM                     A    0     0     0    40   26   46   32   82 FACULTY  24   13  GRAD    236  A     0     0
IN DEPT OF                      B    2     2     2                             OTHER    1    0  UNDGR   570  B   118   134
                                M    2     2     2  NO. JOINT APPTS        6                                M    75    78
                                D    1     1     1                                                          D     5    14

CPR PROGRAM                     A    0     0     0     6    5    3    0    7 FACULTY   3    3  GRAD      0  A     0     0
IN DEPT OF                      B    1     1     1                             OTHER    0    0  UNDGR    60  B    14     8
                                M    0     0     1  NO. JOINT APPTS        4                                M     0     0
                                D    0     0     0                                                          D     0     0

CSC PROGRAM                     A    1     1     1   854  412  704  452 1372 FACULTY 380  478  GRAD   4749  A     1     5
IN DEPT OF                      B   86    93    93                             OTHER   31   49  UNDGR 11845  B  2159  2757
                                M   69    73    77  NO. JOINT APPTS      290                                M   971  1123
                                D   39    40    42                                                          D   135   184

CSE PROGRAM                     A    0     0     0    97   36   33   35  130 FACULTY  30   54  GRAD    724  A     0     0
IN DEPT OF                      B    9     8     8                             OTHER    0   11  UNDGR  1075  B   185   259
                                M    8     8     8  NO. JOINT APPTS       12                                M   137   167
                                D    6     6     6                                                          D    18    26

CST PROGRAM                     A    1     1     1     2    0    2    4    4 FACULTY   0    5  GRAD      0  A     5     5
IN DEPT OF                      B    1     1     1                             OTHER    0    2  UNDGR    67  B     7    10
                                M    0     0     0  NO. JOINT APPTS        0                                M     0     0
                                D    0     0     0                                                          D     0     0

CTE PROGRAM                     A    3     3     3     7    0    0    1    4 FACULTY   0    0  GRAD      0  A    21    23
IN DEPT OF                      B    0     0     0                             OTHER    0    0  UNDGR   216  B     0     0
                                M    0     0     0  NO. JOINT APPTS        0                                M     0     0
                                D    0     0     0                                                          D     0     0

DPR PROGRAM                     A    3     3     3    22    4   16   19   33 FACULTY  10    8  GRAD     39  A    97   128
IN DEPT OF                      B    4     4     4                             OTHER    0    0  UNDGR   939  B    44   100
                                M    1     1     1  NO. JOINT APPTS        9                                M    18    20
                                D    1     1     1                                                          D     0     1

ICS PROGRAM                     A    0     0     0    38   17   13   23   61 FACULTY   9   14  GRAD    217  A     0     0
IN DEPT OF                      B    3     3     3                             OTHER    1    1  UNDGR   535  B   121   158
                                M    2     2     2  NO. JOINT APPTS        2                                M    70    63
                                D    2     2     2                                                          D     5     4

ISC PROGRAM                     A    0     0     0    29    8    9   46   51 FACULTY   9   15  GRAD    338  A     0     0
IN DEPT OF                      B    1     2     2                             OTHER    0    0  UNDGR    97  B    20    35
                                M    3     3     3  NO. JOINT APPTS        6                                M   125   138
                                D    2     2     2                                                          D     3     6

ISY PROGRAM                     A    1     1     0    91   22   83   43  143 FACULTY  42   31  GRAD    342  A     3    15
IN DEPT OF                      B   12    12    12                             OTHER    6    4  UNDGR   916  B   168   200
                                M    7     7     8  NO. JOINT APPTS       11                                M    98   120
                                D    5     5     5                                                          D    13    15

OTH PROGRAM                     A    0     0     0    77   49   56   72  139 FACULTY  22   62  GRAD    373  A     0     0
IN DEPT OF                      B    8     8    10                             OTHER    1   18  UNDGR   845  B   135   153
                                M    9     9    10  NO. JOINT APPTS       36                                M    88    89
                                D    8     8     8                                                          D     8    15

SAN PROGRAM                     A    0     0     0    10    0    0    2   11 FACULTY   0    0  GRAD      0  A     0     0
IN DEPT OF                      B    1     1     1                             OTHER    0    0  UNDGR   356  B    72    99
                                M    0     0     0  NO. JOINT APPTS        0                                M     0     0
                                D    0     0     0                                                          D     0     0

SCE PROGRAM                     A    0     0     0     5    1    3    8    9 FACULTY   5    1  GRAD     20  A     0     0
IN DEPT OF                      B    1     1     1                             OTHER    0    0  UNDGR   100  B    18    25
                                M    1     1     1  NO. JOINT APPTS        3                                M    10    20
                                D    0     0     0                                                          D     0     0

SEN PROGRAM                     A    0     0     0     5    4    2    3    7 FACULTY   0    6  GRAD     22  A     0     0
IN DEPT OF                      B    1     1     1                             OTHER    0    0  UNDGR    85  B    21    20
                                M    2     2     2  NO. JOINT APPTS ,      0                                M    15    19
                                D    0     0     0                                                          D     0     0

SIS PROGRAM                     A    0     0     0     8    2   12   10   10 FACULTY   5    5  GRAD     25  A     0     0
IN DEPT OF                      B    2     2     2                             OTHER    0    0  UNDGR   208  B    53    70
                                M    1     1     1  NO. JOINT APPTS        2                                M     3     3
                                D    1     1     1                                                          D     2     2

SYS PROGRAM                     A    0     0     0     0    0    0   20    6 FACULTY   3   16  GRAD     26  A     0     0
IN DEPT OF                      B    0     0     0                             OTHER    0    0  UNDGR     0  B     0     0
                                M    1     1     1  NO. JOINT APPTS       20                                M     2     3
                                D    0     0     0                                                          D     0     0
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X. SUMMARIES FROM FORM 3-LINES 04-19:
COMPUTER SCIENCE, DATA PROCESSING, INFORMATION SCIENCES, ETC.
COURSES BY GENERAL DESCRIPTORS

The following variables and levels were used for summarizing the responses:

Type of Control	Highest Degree Offered	Fall 1975 Enrollment Class
1. Public	1. Associate	1. Less than 500
2. Private	2. Bachelor's	2. 500 - 2,499
	3. Master's	3. 2,500 - 9,999
	4. Doctorate	4. 10,000 -19,999
		5. 20,000 and above

Summaries for the individual levels (one-way) of the control variables, and the total population are presented provided that there were enough institutions included and/or reporting in the category to preclude identification of the institutions involved (i.e., at least two institutions must have reported in a group for the summary of that group to be included).

Each group summary is identified by the levels of three control variables. For example, group (Public, ,) identifies the summary for all public institutions. Since all summaries for FORM 3 - lines 04-19 are identical in format, only one will be discussed here as a guide. The total group is chosen for this purpose, i.e., group (, ,).

The format of the summaries is identical for each "Course Description," hence, it is necessary to look at only one. We will use "Computer Appreciation" for this purpose. Under "NUMBER OF TERMS OFFERED" there are frequency counts for each of the academic years 1976-77, 1977-78, and 1978-79. A FORM 3 was requested from institutions offering courses in Computer Sciences, Data Processing, Information Science, etc. whether or not they offered a degree program in one or more of these areas. The summaries given here include all reports whether or not a degree program was offered.

During 1976-77, 27 institutions had such a course on the books, but did not offer it during 1976-77, 100 offered the course during one term, 102 twice, 66 three terms and 22 during four terms.

Only credit courses were to have been reported. Ten (10) were reported as being one or two quarter credit hour (Q1-2) courses, 52 were 3 or 4 (Q3-4) quarter credit hours and 7 were 5 or more (Q-5) quarter credit hours. (S1-2 refers to 1 or 2 semester credit hours, etc.)

One hundred twenty (120) courses were lecture (L) only, 129 had a laboratory plus lecture (R), two used TV or film plus laboratory (T) and 24 consisted of lecture plus extensive use of visual aids (A), etc. (see appendix).

Fifty (50) institutions reported section sizes of from 1-10 students, 71 reported section sizes between 11 and 20, etc.

Class intervals for total enrollment in the courses for 1976-77 were 1-50, 51-100, 101-150, 151-200, and > 200. One hundred seventy two (172) courses enrolled from 1 to 50 students during 1976-77, etc. The total enrollment in all such courses for 1976-77 was 32,760.

The institutions were asked to report the cost of computer services supplied for these courses. The "TOTAL" cost for both in department (IN-DPT) out of department (OUT-DPT) services was $173,000 for 1976-77. One hundred eight thousand dollars (108,000) of this was for services in the same department (IN-DPT) and another $65,000 was outside the department (OUT-DPT). (Note: These numbers are low because many institutions did not report on this item.)

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                                        SUMMARY BY COURSE TYPE

   GROUP (                   )
                      NUMBER  OF  TERMS     CR HOURS                          **  AVERAGE **  *ENRCLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTION        CFFERED          QTR  AND                                  SECT    * 1976-77  * 1976-77 (THCUS$)
                      76-77 77-78 78-79     SEMESTER   MCDE CF CPER       NO.    SIZE     * NO.  FREQ* ON AND OFF-CAMPUS

COMPUTER APPRECIATICN  0-  27    25    27   Q1-2    10  L- 120 P-   6    1-10    54      1- 50   172      IN-OPT    108
                       1- 100   111   111   Q3-4    52  R- 129 D-   0   11-20    71     51-100    62      OUT-OPT    65
                       2- 102    92    87   Q >5     7  T-   2 S-   3   21-30   115    101-150    24
                       3-  66    65    65   S1-2    36  A-  24 C-   1   31-40    38    151-200    13
                       4-  22    23    27   S3-4   166  E-  30              41-50     9       >200    48
                                            S >5     2  I-   4              > 50    32      TOTAL  32760     TOTAL     173

PROBLEM SOLVING COURSE 0-  22    28    44   Q1-2     2  L-  44 P-   0    1-10    61      1- 50   134      IN-OPT     33
 IN THE HUMANITIES     1-  96    84    70   Q3-4    21  R-  52 D-   3   11-20    50     51-100    20      OUT-OPT    51
                       2-  36    41    40   Q >5     3  T-   C S-   5   21-30    34    101-15C     3
                       3-  10    11     9   S1-2     6  A-  29 C-  25   31-40    10    151-200     1
                       4-   3     3     4   S3-4   128  E-   6              41-50     5       >200     9
                                            S >5     1  I-   3              > 50     7      TOTAL   7097     TOTAL      85

INTRODUCTORY COURSE IN 0- 101    67    87   Q1-2    78  L- 292 P-  20    1-10   223      1- 50   791      IN-OPT   1105
 SOME COMPILER LANGUAGE 1- 477  492   478   Q3-4   272  R- 968 D-   0   11-20   434     51-100   248      OUT-CPT  1860
 SUCH AS FORTRAN, PL/1, 2- 410  411   400   Q >5    65  T-   2 S-   1   21-30   434    101-150   120
 BASIC, ALGCL          3- 293   302   311   S1-2   189  A-  19 C-   1   31-40   177    151-200    74
                       4- 128   135   130   S3-4   672  E- 100              41-50    72       >200   187
                                            S >5     5  I-  17              > 50    80      TOTAL 161043     TOTAL    2965

INTRODUCTORY COURSE IN A 0-  60  41    35   Q1-2    13  L- 114 P-   7    1-10   146      1- 50   453      IN-OPT    245
 LANGUAGE SUCH AS COBOL 1- 322  314   317   Q3-4   147  R- 509 D-   0   11-20   240     51-100   127      OUT-OPT   409
                       2- 187   215   212   Q >5    38  T-   1 S-   1   21-30   224    101-150    65
                       3- 106   106   110   S1-2    41  A-   9 C-   0   31-40    63    151-200    26
                       4-  35    34    36   S3-4   428  E-  60              41-50    24       >200    40
                                            S >5     2  I-  10              > 50    14      TOTAL  49215     TOTAL     654

PROBLEM SOLVING COURSE 0-  50    86    91   Q1-2    18  L- 122 P-   8    1-10   165      1- 50   396      IN-OPT    144
 IN ENGINEERING OR     1- 290   258   260   Q3-4    53  R- 236 D-  19   11-20   172     51-100    72      OUT-OPT   101
 SCIENTIFIC APPLI-     2- 115   118   108   Q >5     4  T-   1 S-   4   21-30    95    101-150    13
 CATIONS               3-  39    34    37   S1-2    41  A-  45 C-   0   31-40    45    151-200     7
                       4-  10     8     8   S3-4   326  E-  37              41-50    11       >200    16
                                            S >5     8  I-  32              > 50    16      TOTAL  20505     TOTAL     246

INTRODUCTORY COURSE IN 0-  24    32    47   Q1-2     9  L- 119 P-   4    1-10    87      1- 50   270      IN-OPT    444
 PROGRAMMING           1- 173   167   150   Q3-4   118  R- 354 D-   0   11-20   134     51-100   108      OUT-OPT   952
                       2- 190   180   175   Q >5    32  T-   0 S-   1   21-30   173    101-150    57
                       3- 117   121   122   S1-2    37  A-  14 C-   0   31-40    86    151-200    28
                       4-  41    45    51   S3-4   305  E-  51              41-50    31       >200    85
                                            S >5     5  I-   5              > 50    37      TOTAL  69312     TOTAL    1396

ADVANCED COURSE IN     0-  98    64    69   Q1-2    15  L- 186 P-  16    1-10   286      1- 50   735      IN-OPT    306
 PROGRAMMING           1- 468   489   482   Q3-4   188  R- 586 D-   0   11-20   342     51-100   113      OUT-OPT   587
                       2- 239   240   235   Q >5    62  T-   0 S-   5   21-30   215    101-150    38
                       3-  89    95   100   S1-2    25  A-  12 C-   0   31-40    48    151-200    16
                       4-  22    28    30   S3-4   549  E-  73              41-50    11       >200    14
                                            S >5     9  I-  38              > 50    14      TOTAL  33321     TOTAL     893

FIRST COURSE IN COMPUTER 0-  13  14    11   Q1-2     3  L-  63 P-   6    1-10    38      1- 50    99      IN-OPT     47
 DESIGN                1-  77    75    75   Q3-4    35  R-  76 D-   0   11-20    43     51-100    25      OUT-OPT    45
                       2-  33    35    37   Q >5    10  T-   0 S-   0   21-30    28    101-150    14
                       3-  25    22    24   S1-2     9  A-   1 C-   0   31-40    21    151-200     5
                       4-   4     6     5   S3-4    81  E-   4              41-50    14       >200    10
                                            S >5     0  I-   3              > 50     9      TOTAL   9888     TOTAL      92

ADVANCED COURSE IN COM- 0-  36   23    26   Q1-2     2  L-  88 P-   8    1-10    78      1- 50   158      IN-OPT    123
 PUTER DESIGN (COMPUTER 1-  95  106   101   Q3-4    55  R-  71 D-   0   11-20    43     51-100    15      OUT-OPT    53
 ARCHITECTURE)         2-  30    31    33   Q >5     4  T-   0 S-   7   21-30    41    101-150     4
                       3-  17    18    18   S1-2     6  A-   2 C-   0   31-40    10    151-200     3
                       4-   3     3     3   S3-4   108  E-   4              41-50     4       >200     1
                                            S >5     1  I-   1              > 50     5      TOTAL   4867     TOTAL     175

PROGRAMMING LANGUAGES  0-  66    50    50   Q1-2     5  L- 164 P-   6    1-10   126      1- 50   306      IN-CPT    208
 (STRUCTURE, ETC.)     1- 221   228   226   Q3-4    72  R- 168 D-   0   11-20   121     51-100    54      CUT-OPT   192
                       2-  57    65    71   Q >5    26  T-   0 S-   7   21-30    84    101-150    14
                       3-  35    34    30   S1-2     7  A-   5 C-   2   31-40    22    151-200     6
                       4-   8    10    10   S3-4   240  E-  26              41-50    21       >200     7
                                            S >5     7  I-   9              > 50    13      TCTAL  13622     TOTAL     400

OPERATING SYSTEMS      0-  94    72    59   Q1-2    11  L- 255 P-   2    1-10   184      1- 50   443      IN-OPT    281
 (SYSTEMS PROGRAMMING, 1- 305   323   329   Q3-4   141  R- 222 D-   0   11-20   160     51-100    49      OUT-OPT   228
  ETC.)                2-  91    90    97   Q >5    26  T-   1 S-   3   21-30   108    101-150    23
                       3-  27    32    28   S1-2    17  A-  12 C-   0   31-40    45    151-20C     4
                       4-   6     6    10   S3-4   301  E-  24              41-50    15       >200     4
                                            S >5     3  I-   4              > 50    11      TOTAL  15566     TOTAL     509

DATA STRUCTURES        0-  63    43    43   Q1-2     7  L- 153 P-   1    1-10   101      1- 50   238      IN-OPT    208
                       1- 162   176   171   Q3-4    72  R- 129 D-   1   11-20    94     51-100    42      CUT-OPT   180
                       2-  52    56    59   Q >5    16  T-   0 S-   2   21-30    66    101-15C    13
                       3-  21    23    25   S1-2     2  A-   9 C-   0   31-40    22    151-200     8
                       4-   6     6     6   S3-4   185  E-   9              41-50    13       >200     3
                                            S >5     0  I-   0              > 50     8      TOTAL  10222     TOTAL     388
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                                                  SUMMARY BY COURSE TYPE
    GROUP (                              )        CONTINUED
                            NUMBER  OF  TERMS          CR HOURS                           **  AVERAGE ** *ENRCLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTION               OFFERED              QTR AND                                 SECT     * 1976-77  * 1976-77 (THOUS$)
                          76-77 77-78 78-79            SEMESTER    MODE OF OPER       NO.   SIZE     * NO.  FREQ* ON AND OFF-CAMPUS

AUTOMATA THEORY             0-  28    27    19         Q1-2     1  L-  86 P-   0   1-10    55       1- 50   93        IN-OPT      1
                            1-  55    56    65         Q3-4    31  R-  15 D-   0  11-20    26      51-100    8       OUT-OPT      8
                            2-  18    18    17         Q >5     5  T-   0 S-   2  21-30    15     101-150    3
                            3-   4     4     4         S1-2     2  A-   0 C-   0  31-40     5     151-200    1
                            4-   0     0     0         S3-4    64  E-   2           41-50     3        >200    0
                                                       S >5     0  I-   0            > 50     1       TOTAL 2190       TOTAL        9

SIMULATION APPLICATIONS     0-  20    14    14         Q1-2     1  L-  57 P-   1   1-10    51       1- 50  116        IN-OPT     12
 (NON-ECONCMETRIC)          1-  92    95    94         Q3-4    30  R-  46 D-   0  11-20    44      51-100    5       OUT-OPT     69
                            2-  10    13    14         Q >5     5  T-   0 S-   4  21-30    17     101-150    1
                            3-   1     1     1         S1-2     3  A-   6 C-   0  31-40     8     151-200    0
                            4-   0     0     0         S3-4    76  E-   6           41-50     3        >200    1
                                                       S >5     1  I-   3            > 50     0       TOTAL 2474       TOTAL       80

SIMULATION LANGUAGES        0-  25    28    21         Q1-2     2  L-  71 P-   0   1-10    57       1- 50  126        IN-OPT     29
 AND/OR TECHNIQUES          1-  91    91    96         Q3-4    38  R-  55 D-   0  11-20    40      51-100    9       OUT-OPT     53
                            2-  19    15    18         Q >5     2  T-   0 S-   3  21-30    29     101-150    2
                            3-   2     3     2         S1-2     5  A-   6 C-   0  31-40     7     151-200    0
                            4-   0     0     0         S3-4    81  E-   1           41-50     0        >200    0
                                                       S >5     0  I-   1            > 50     4       TOTAL 2550       TOTAL       82

ARTIFICIAL INTELLIGENCE     0-  41    40    29         Q1-2     5  L- 117 P-   2   1-10    88       1- 50  156        IN-OPT    114
 (HEURISTIC PROGRAMMING)    1- 105   106   117         Q3-4    47  R-  21 D-   0  11-20    47      51-100    6       OUT-OPT     46
                            2-  14    15    15         Q >5     5  T-   0 S-  15  21-30    20     101-150    0
                            3-   2     1     1         S1-2     3  A-   4 C-   0  31-40     5     151-200    1
                            4-   1     1     1         S3-4    99  E-   2           41-50     0        >200    0
                                                       S >5     0  I-   2            > 50     3       TOTAL 2346       TOTAL      159

HYBRID COMPUTERS            0-   8     6     2         Q1-2     0  L-   6 P-   0   1-10    11       1- 50   24        IN-OPT      5
                            1-  13    15    19         Q3-4     8  R-  15 D-   0  11-20    11      51-100    2       OUT-OPT      2
                            2-   3     3     3         Q >5     1  T-   0 S-   0  21-30     4     101-150    0
                            3-   1     1     1         S1-2     2  A-   3 C-   0  31-40     0     151-200    0
                            4-   1     1     1         S3-4    14  E-   2           41-50     0        >200    0
                                                       S >5     0  I-   0            > 50     0       TOTAL  366       TOTAL        7

DISCRETE STRUCTURES         0-  32    16    22         Q1-2     3  L-  97 P-   0   1-10    45       1- 50   94        IN-OPT      2
                            1-  55    73    65         Q3-4    24  R-  18 D-   0  11-20    34      51-100   18       OUT-OPT     38
                            2-  26    24    25         Q >5     5  T-   0 S-   1  21-30    22     101-150    8
                            3-  10    10    11         S1-2     5  A-   2 C-   0  31-40    12     151-200    1
                            4-   0     0     0         S3-4    75  E-   5           41-50     5        >200    2
                                                       S >5     0  I-   0            > 50     5       TOTAL 4251       TOTAL       41

COMPUTER ORGANIZATION       0-  27    28    17         Q1-2     8  L-  74 P-   3   1-10    54       1- 50  145        IN-OPT     40
                            1- 106   104   116         Q3-4    43  R-  82 D-   0  11-20    67      51-100   24       OUT-OPT     53
                            2-  30    29    27         Q >5     8  T-   2 S-   2  21-30    33     101-150    6
                            3-   9    10    12         S1-2     7  A-   7 C-   0  31-40    17     151-200    0
                            4-   4     4     4         S3-4   101  E-   5           41-50     2        >200    1
                                                       S >5     0  I-   1            > 50     3       TOTAL 5052       TOTAL       93

SWITCHING THEORY            0-  17    15     9         Q1-2     1  L-  59 P-   4   1-10    28       1- 50   69        IN-OPT     19
                            1-  49    51    57         Q3-4    23  R-  22 D-   0  11-20    26      51-100   12       OUT-OPT      2
                            2-  12    14    12         Q >5     0  T-   0 S-   0  21-30    16     101-150    4
                            3-   7     6     8         S1-2     4  A-   0 C-   0  31-40     9     151-200    1
                            4-   2     1     1         S3-4    56  E-   2           41-50     2        >200    1
                                                       S >5     0  I-   0            > 50     6       TOTAL 2832       TOTAL       21

SEQUENTIAL MACHINES         0-   6    10     4         Q1-2     1  L-  22 P-   0   1-10    14       1- 50   28        IN-OPT     18
                            1-  18    14    20         Q3-4    13  R-   9 D-   0  11-20    11      51-100    5       OUT-OPT      1
                            2-   5     5     6         Q >5     1  T-   0 S-   0  21-30     5     101-150    0
                            3-   3     3     2         S1-2     0  A-   2 C-   0  31-40     3     151-200    0
                            4-   1     1     1         S3-4    16  E-   0           41-50     0        >200    0
                                                       S >5     0  I-   0            > 50     0       TOTAL  793       TOTAL       18

COMPILER CONSTRUCTION       0-  47    49    33         Q1-2     3  L- 116 P-   3   1-10    93       1- 50  197        IN-OPT     97
                            1- 133   136   149         Q3-4    63  R-  80 D-   0  11-20    62      51-100   12       OUT-OPT    160
                            2-  27    19    23         Q >5     8  T-   0 S-   5  21-30    40     101-150    4
                            3-   5     8     7         S1-2     4  A-   4 C-   0  31-40    12     151-200    0
                            4-   1     1     1         S3-4   125  E-   5           41-50     2        >200    0
                                                       S >5     1  I-   0            > 50     4       TOTAL 4108       TOTAL      257

FORMAL LANGUAGES AND        0-  33    31    18         Q1-2     4  L-  90 P-   0   1-10    64       1- 50  117        IN-OPT     67
 SYNTACTIC ANALYSIS         1-  75    77    89         Q3-4    47  R-  22 D-   0  11-20    37      51-100    5       OUT-OPT     31
                            2-  12    11    14         Q >5     6  T-   0 S-   3  21-30    16     101-15C    2
                            3-   1     2     0         S1-2     1  A-   4 C-   1  31-40     5     151-20C    0
                            4-   3     3     3         S3-4    64  E-   4           41-50     0        >200    0
                                                       S >5     0  I-   0            > 50     2       TOTAL 1936       TOTAL       98

INTRODUCTORY COMPUTER       0-  22    17    18         Q1-2     5  L-  78 P-   5   1-10    42       1- 50  104        IN-OPT     15
 ORGANIZATICN               1-  80    83    80         Q3-4    40  R-  54 D-   0  11-20    37      51-100   28       OUT-OPT     65
                            2-  39    41    42         Q >5     5  T-   0 S-   0  21-30    38     101-150   10
                            3-  10    10    11         S1-2     6  A-   8 C-   0  31-40    23     151-200    6
                            4-   3     3     3         S3-4    80  E-  10           41-50     8        >200    7
                                                       S >5     0  I-   0            > 50     7       TOTAL 8376       TOTAL       79
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SUMMARY BY COURSE TYPE
CONTINUED

GROUP ( ) COURSE DESCRIPTION	NUMBER OF TERMS OFFERED	76-77	77-78	78-79	CR HOURS QTR AND SEMESTER		MODE OF OPER				** AVERAGE ** NO.	SECT SIZE	*ENROLLMENT* * 1976-77 * NO.	FREQ*	COST COMPUTER SVCS * 1976-77 (THOUS$) ON AND OFF-CAMPUS	
ACVANCED COMPUTER	0-	20	7	11	Q1-2	2	L-	46	P-	1	1-10	33	1- 50	77	IN-DPT	23
ORGANIZATION	1-	49	63	57	Q3-4	26	R-	26	D-	0	11-20	25	51-100	6	OUT-DPT	30
	2-	15	13	15	Q >5	1	T-	1	S-	2	21-30	16	101-150	2		
	3-	1	2	2	S1-2	3	A-	4	C-	0	31-40	6	151-200	0		
	4-	0	0	0	S3-4	51	E-	5			41-50	1	>200	0		
					S >5	0	I-	0			> 50	4	TOTAL	1836	TOTAL	53
INFORMATION STORAGE	0-	17	14	9	Q1-2	2	L-	35	P-	0	1-10	30	1- 50	67	IN-DPT	61
AND RETRIEVAL	1-	42	44	46	Q3-4	15	R-	34	D-	0	11-20	23	51-100	3	CUT-DPT	35
	2-	13	12	15	Q >5	9	T-	0	S-	0	21-30	11	101-150	2		
	3-	1	3	3	S1-2	2	A-	4	C-	0	31-40	7	151-200	1		
	4-	2	2	2	S3-4	43	E-	2			41-50	1	>200	2		
					S >5	0	I-	0			> 50	3	TOTAL	2728	TOTAL	96
COMPUTER GRAPHICS	0-	23	11	16	Q1-2	3	L-	40	P-	1	1-10	41	1- 50	87	IN-DPT	14
	1-	51	63	57	Q3-4	24	R-	37	D-	0	11-20	29	51-100	2	OUT-DPT	56
	2-	13	13	14	Q >5	2	T-	0	S-	1	21-30	14	101-150	0		
	3-	3	3	3	S1-2	7	A-	3	C-	2	31-40	5	151-200	0		
	4-	0	0	0	S3-4	51	E-	3			41-50	0	>200	1		
					S >5	0	I-	3			> 50	1	TOTAL	2000	TOTAL	70
COMPUTABILITY	0-	26	21	18	Q1-2	3	L-	78	P-	0	1-10	52	1- 50	92	IN-DPT	1
	1-	55	59	64	Q3-4	25	R-	9	D-	0	11-20	29	51-100	3	OUT-DPT	2
	2-	13	14	12	Q >5	2	T-	0	S-	4	21-30	11	101-150	1		
	3-	3	3	3	S1-2	3	A-	3	C-	1	31-40	2	151-200	1		
	4-	0	0	0	S3-4	64	E-	1			41-50	2	>200	0		
					S >5	0	I-	1			> 50	1	TOTAL	1521	TOTAL	3
INTRODUCTORY NUMERICAL	0-	53	53	48	Q1-2	8	L-	196	P-	2	1-10	145	1- 50	321	IN-DPT	93
ANALYSIS (CR METHODS)	1-	233	224	236	Q3-4	53	R-	150	D-	0	11-20	133	51-100	29	CUT-DPT	104
	2-	57	65	58	Q >5	8	T-	1	S-	2	21-30	59	101-150	12		
	3-	26	26	27	S1-2	8	A-	11	C-	0	31-40	21	151-200	4		
	4-	4	5	4	S3-4	245	E-	7			41-50	7	>200	7		
					S >5	4	I-	4			> 50	8	TOTAL	11874	TOTAL	197
ADVANCED NUMERICAL	0-	62	50	51	Q1-2	4	L-	173	P-	0	1-10	138	1- 50	228	IN-DPT	30
ANALYSIS	1-	140	146	148	Q3-4	53	R-	52	D-	0	11-20	61	51-100	8	OUT-DPT	51
	2-	23	28	25	Q >5	12	T-	0	S-	2	21-30	33	101-150	0		
	3-	11	12	12	S1-2	6	A-	5	C-	0	31-40	3	151-200	1		
	4-	1	1	1	S3-4	147	E-	2			41-50	2	>200	0		
					S >5	2	I-	3			> 50	0	TOTAL	3329	TOTAL	81
INTRODUCTORY OPERATIONS	0-	30	19	18	Q1-2	3	L-	95	P-	0	1-10	51	1- 50	123	IN-DPT	7
RESEARCH	1-	84	91	95	Q3-4	22	R-	39	D-	0	11-20	48	51-100	12	OUT-DPT	17
	2-	21	24	21	Q >5	5	T-	1	S-	0	21-30	39	101-150	7		
	3-	8	8	9	S1-2	2	A-	5	C-	0	31-40	7	151-200	1		
	4-	5	6	5	S3-4	111	E-	7			41-50	1	>200	5		
					S >5	0	I-	1			> 50	2	TOTAL	6772	TOTAL	24
ADVANCED OPERATIONS	0-	22	18	22	Q1-2	2	L-	86	P-	1	1-10	47	1- 50	104	IN-DPT	3
RESEARCH	1-	75	81	78	Q3-4	19	R-	21	D-	0	11-20	44	51-100	7	OUT-DPT	70
	2-	14	13	11	Q >5	4	T-	0	S-	0	21-30	15	101-150	4		
	3-	5	4	5	S1-2	8	A-	5	C-	0	31-40	9	151-200	0		
	4-	0	0	0	S3-4	79	E-	2			41-50	1	>200	1		
					S >5	0	I-	1			> 50	0	TOTAL	3919	TOTAL	73
DATA COMMUNICATIONS	0-	18	21	9	Q1-2	3	L-	51	P-	0	1-10	28	1- 50	86	IN-DPT	23
	1-	62	59	72	Q3-4	38	R-	28	D-	0	11-20	38	51-100	9	OUT-DPT	15
	2-	16	16	15	Q >5	5	T-	0	S-	1	21-30	24	101-150	2		
	3-	0	0	0	S1-2	2	A-	7	C-	0	31-40	6	151-200	0		
	4-	1	1	1	S3-4	48	E-	9			41-50	1	>200	0		
					S >5	0	I-	1			> 50	0	TOTAL	2316	TOTAL	37
PROCESS CONTROL	0-	6	8	4	Q1-2	0	L-	18	P-	0	1-10	13	1- 50	37	IN-DPT	519
	1-	24	21	24	Q3-4	10	R-	21	D-	0	11-20	18	51-100	2	OUT-DPT	19
	2-	6	7	7	Q >5	0	T-	0	S-	0	21-30	7	101-150	0		
	3-	2	2	3	S1-2	2	A-	0	C-	1	31-40	1	151-200	0		
	4-	1	2	2	S3-4	26	E-	0			41-50	0	>200	1		
					S >5	1	I-	0			> 50	1	TOTAL	8652	TOTAL	539
DATA PREPARATION (KEY	0-	5	9	9	Q1-2	12	L-	5	P-	22	1-10	41	1- 50	80	IN-DPT	113
PUNCH, VERIFIER, DATA	1-	29	24	27	Q3-4	25	R-	75	D-	0	11-20	50	51-100	25	OUT-DPT	68
ENTRY,...)	2-	41	42	36	Q >5	4	T-	1	S-	0	21-30	20	101-150	9		
	3-	24	22	24	S1-2	40	A-	0	C-	0	31-40	9	151-200	6		
	4-	21	23	24	S3-4	37	E-	8			41-50	0	>200	1		
					S >5	1	I-	10			> 50	1	TOTAL	6412	TOTAL	180
UNIT RECORD (EAM)	0-	3	4	5	Q1-2	2	L-	6	P-	2	1-10	4	1- 50	21	IN-DPT	12
	1-	17	17	15	Q3-4	7	R-	19	D-	0	11-20	10	51-100	6	OUT-DPT	17
	2-	4	5	7	Q >5	1	T-	0	S-	0	21-30	9	101-150	2		
	3-	5	3	2	S1-2	4	A-	0	C-	0	31-40	6	151-200	0		
	4-	1	1	1	S3-4	11	E-	3			41-50	1	>200	1		
					S >5	0	I-	0			> 50	0	TOTAL	1511	TOTAL	29

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                                                   SUMMARY BY CCURSE TYPE
      GROUP I                               I      CONTINUED
                           NUMBER  OF  TERMS          CR HOURS                            **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
   COURSE DESCRIPTICN           OFFERED               QTR AND                                  SECT      * 1976-77  * 1976-77 (THOUS$)
                           76-77 77-78 78-79          SEMESTER    MCDE CF OPER          NO.   SIZE      * NO.  FREQ* ON AND OFF-CAMPUS

   INTRODUCTORY COURSE     0-  18    13    16          Q1-2    6  L- 150 P-   2   1-10    44          1- 50  166       IN-DPT    361
    IN DATA PRCCESSING     1- 113   116   108          Q3-4   98  R- 216 D-   0  11-20   107         51-100   82       CUT-DPT   414
                           2- 131   121   125          Q >5   19  T-   2 S-   1  21-30   164        101-150   42
                           3- 132   139   140          S1-2   24  A-  35 C-   0  31-40    94        151-200   29
                           4-  68    73    73          S3-4  275  E-  55          41-50    33           >200  148
                                                       S >5    8  I-   6          > 50    25          TOTAL 99614      TOTAL      775

   ADVANCED COURSE IN DATA 0-  18    11    13          Q1-2    1  L-  30 P-   5   1-10    42          1- 50   89       IN-DPT     31
    PROCESSING             1-  56    60    59          Q3-4   28  R-  65 D-   0  11-20    35         51-100   19       OUT-DPT    16
                           2-  32    32    30          Q >5    4  T-   0 S-   2  21-30    27        101-150    3
                           3-  15    18    17          S1-2   18  A-   2 C-   0  31-40    16        151-200    7
                           4-   1     1     3          S3-4   64  E-   8          41-50     1           >200    4
                                                       S >5    0  I-  10          > 50     1          TOTAL  6019      TOTAL       47

   PROBLEM SCLVING COURSE  0-  25    27    30          Q1-2    8  L-  83 P-  11   1-10    85          1- 50  176       IN-DPT     41
    IN BUSINESS APPLI-     1- 118   119   118          Q3-4   48  R-  89 D-   0  11-20    70         51-100   28       OUT-DPT   250
    CATIONS                2-  64    62    60          Q >5   15  T-   0 S-   7  21-30    52        101-150   14
                           3-  29    28    28          S1-2    7  A-  29 C-   0  31-40    38        151-200    7
                           4-  15    15    15          S3-4  158  E-  12          41-50     5           >200   26
                                                       S >5    2  I-  20          > 50     1          TOTAL 21666      TOTAL      292

   ADVANCED BUSINESS APPLI- 0-  16    19    15         Q1-2    6  L-  44 P-   5   1-10    46          1- 50  100       IN-DPT     18
    CATIONS (MARKETING,    1-  65    61    65          Q3-4   20  R-  43 D-   0  11-20    44         51-100   12       OUT-DPT    18
    FINANCE, PRODUCTION,   2-  27    23    26          Q >5   10  T-   0 S-   4  21-30    20        101-150    5
    ETC.)                  3-  15    17    15          S1-2    6  A-  12 C-   1  31-40     9        151-200    5
                           4-   1     4     3          S3-4   80  E-   5          41-50     3           >200    2
                                                       S >5    1  I-  10          > 50     2          TOTAL  4566      TOTAL       36

   INTRODUCTCRY SYSTEMS    0-  34    15    20          Q1-2    3  L- 101 P-   1   1-10    62          1- 50  211       IN-DPT     28
    ANALYSIS (BUSINESS)    1- 148   158   153          Q3-4   71  R- 102 D-   0  11-20   103         51-100   33       OUT-DPT    14
                           2-  53    60    58          Q >5   18  T-   1 S-   3  21-30    74        101-150    8
                           3-  19    20    21          S1-2    2  A-  36 C-   0  31-40    19        151-200    3
                           4-   9    10    11          S3-4  161  E-  17          41-50     3           >200    8
                                                       S >5    3  I-   2          > 50     2          TOTAL 11061      TOTAL       42

   LARGE SCALE INFORMATION 0-   8     2     2          Q1-2    1  L-  11 P-   0   1-10    12          1- 50   29       IN-DPT      3
    PROCESSING SYSTEMS     1-  16    21    20          Q3-4    7  R-  14 D-   0  11-20    10         51-100    5       OUT-DPT    20
                           2-   7     7     8          Q >5    2  T-   0 S-   2  21-30     6        101-150    0
                           3-   3     4     3          S1-2    0  A-   2 C-   0  31-40     3        151-200    0
                           4-   0     0     1          S3-4   23  E-   4          41-50     3           >200    0
                                                       S >5    0  I-   1          > 50     0          TOTAL   883      TOTAL       23

   FILE ORGANIZATION       0-  11     7     3          Q1-2    0  L-  22 P-   0   1-10    17          1- 50   53       IN-DPT     45
                           1-  33    32    34          Q3-4   20  R-  26 D-   0  11-20    22         51-100    5       OUT-DPT    29
                           2-  15    16    18          Q >5    2  T-   1 S-   0  21-30    13        101-150    2
                           3-   2     6     6          S1-2    1  A-   5 C-   0  31-40     7        151-200    1
                           4-   0     0     0          S3-4   33  E-   7          41-50     1           >200    0
                                                       S >5    0  I-   0          > 50     1          TOTAL  1822      TOTAL       74

   DATA BASE MANAGEMENT    0-  35    18     7          Q1-2    5  L-  80 P-   1   1-10    46          1- 50  121       IN-DPT     51
                           1-  78    90    99          Q3-4   41  R-  35 D-   0  11-20    45         51-100   19       OUT-DPT    42
                           2-  23    26    30          Q >5    4  T-   2 S-   3  21-30    33        101-150    2
                           3-   5     7     5          S1-2    2  A-   5 C-   0  31-40     9        151-200    0
                           4-   1     1     1          S3-4   85  E-  12          41-50     7           >200    0
                                                       S >5    1  I-   0          > 50     2          TOTAL  3497      TOTAL       93

   INFORMATION SYSTEMS     0-  29    12    16          Q1-2    7  L-  66 P-   2   1-10    57          1- 50  146       IN-DPT     28
    DESIGN (INTRODUCTORY)  1- 105   120   118          Q3-4   47  R-  83 D-   1  11-20    68         51-100   23       OUT-DPT    55
                           2-  31    32    28          Q >5    6  T-   1 S-   2  21-30    33        101-150    7
                           3-  13    14    16          S1-2    6  A-   8 C-   0  31-40    13        151-200    2
                           4-   2     2     2          S3-4  106  E-  15          41-50     5           >200    2
                                                       S >5    1  I-   2          > 50     4          TOTAL  6287      TOTAL       83

   INFORMATION SYSTEMS     0-  20    15    13          Q1-2    3  L-  48 P-   3   1-10    56          1- 50  111       IN-DPT     11
    DESIGN (ADVANCED)      1-  82    83    84          Q3-4   40  R-  51 D-   0  11-20    40         51-100   10       OUT-DPT    35
                           2-  15    19    16          Q >5    6  T-   1 S-   2  21-30    18        101-150    2
                           3-   4     3     7          S1-2    1  A-   5 C-   1  31-40     7        151-200    1
                           4-   3     4     4          S3-4   68  E-   8          41-50     2           >200    0
                                                       S >5    1  I-   5          > 50     1          TOTAL  2720      TOTAL       47

   MANAGEMENT INFORMATION  0-  18    13    10          Q1-2    1  L-  55 P-   0   1-10    26          1- 50   92       IN-DPT     46
    SYSTEMS                1-  63    69    72          Q3-4   26  R-  33 D-   0  11-20    37         51-100   15       CUT-DPT    34
                           2-  24    22    22          Q >5    1  T-   1 S-   5  21-30    31        101-150    4
                           3-   7     9     9          S1-2    4  A-  18 C-   0  31-40    16        151-200    1
                           4-   5     4     4          S3-4   76  E-   4          41-50     3           >200    5
                                                       S >5    3  I-   1          > 50     4          TOTAL  5301      TOTAL       80

   MANAGEMENT OF COMPUTER  0-  15     9     6          Q1-2    1  L-  31 P-   4   1-10    29          1- 50   54       IN-DPT      6
    CENTERS OF INFORMATION 1-  32    37    38          Q3-4   18  R-  14 D-   0  11-20    20         51-100   10       OUT-DPT     2
     PROCESSING DEPARTMENTS 2- 12    13    14          Q >5    0  T-   2 S-   4  21-30    12        101-150    2
                           3-   6     7     8          S1-2    3  A-   9 C-   0  31-40     2        151-200    1
                           4-   2     1     1          S3-4   42  E-   2          41-50     4           >200    0
                                                       S >5    0  I-   1          > 50     0          TOTAL  1895      TOTAL        7
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                                                     SUMMARY BY COURSE TYPE
    GROUP I                              I          CONTINUED
                              NUMBER  OF  TERMS      CR HOURS                              **  AVERAGE ** *ENRCLLMENT* COST COMPUTER SVCS
                                    OFFERED          QTR AND                                   SECT      * 1976-77  * 1976-77 (THOUS$)
 COURSE DESCRIPTION             76-77 77-78 78-79    SEMESTER    MODE OF OPER      NO.   SIZE       * NO.  FREQ* ON AND OFF-CAMPUS

COMPUTERS AND ACCOUNTING 0-    5    10    11        Q1-2    1  L-  19 P-   0   1-10      6          1- 50   31       IN-DPT     84
 (INCLUDING AUDITING)    1-   18    11    10        Q3-4    5  R-  14 D-   0  11-20     15         51-100    7      OUT-DPT      5
                         2-   15    18    18        Q >5    2  T-   0 S-   2  21-30     17        101-150    3
                         3-    5     4     4        S1-2    3  A-   2 C-   1  31-40      5        151-200    1
                         4-    2     2     2        S3-4   30  E-   6         41-50      1           >200    3
                                                    S >5    0  I-   1          > 50      1         TOTAL  2576      TOTAL       89

ECONOMETRIC SIMULATION   0-    4     6     5        Q1-2    0  L-  12 P-   0   1-10     16          1- 50   27       IN-DPT      3
 APPLICATIONS            1-   16    15    14        Q3-4    9  R-  13 D-   0  11-20      6         51-100    2      OUT-DPT      1
                         2-   11     9    11        Q >5    2  T-   0 S-   2  21-30      9        101-150    1
                         3-    0     1     1        S1-2    0  A-   2 C-   0  31-40      0        151-200    1
                         4-    0     0     0        S3-4   19  E-   2         41-50      0           >200    0
                                                    S >5    0  I-   0          > 50      0         TOTAL   779      TOTAL        4

INSTRUCTIONAL DESIGN     0-    0     2     0        Q1-2    0  L-   2 P-   1   1-10      5          1- 50    6       IN-DPT      0
                         1-    5     3     5        Q3-4    3  R-   3 D-   0  11-20      1         51-100    0      OUT-DPT      0
                         2-    1     1     1        Q >5    0  T-   0 S-   0  21-30      0        101-150    0
                         3-    0     0     0        S1-2    0  A-   0 C-   0  31-40      0        151-200    0
                         4-    0     0     0        S3-4    3  E-   0         41-50      0           >200    0
                                                    S >5    0  I-   0          > 50      0         TOTAL    40      TOTAL        0

INSTRUCTIONAL SYSTEMS    0-    4     4     3        Q1-2    0  L-   4 P-   2   1-10      9          1- 50   12       IN-DPT      5
                         1-    5     4     6        Q3-4    5  R-   5 D-   0  11-20      1         51-100    0      OUT-DPT      2
                         2-    4     5     4        Q >5    0  T-   0 S-   0  21-30      2        101-150    1
                         3-    0     0     0        S1-2    0  A-   0 C-   1  31-40      0        151-200    0
                         4-    0     0     0        S3-4    8  E-   1         41-50      0           >200    0
                                                    S >5    0  I-   0          > 50      1         TOTAL   218      TOTAL        7

COMPUTER BASED           0-    4    10     8        Q1-2    0  L-  13 P-   1   1-10     20          1- 50   35       IN-DPT      7
INSTRUCTION              1-   25    21    23        Q3-4   12  R-  19 C-   0  11-20     13         51-100    6      OUT-DPT      5
                         2-   11     7     8        Q >5    2  T-   0 S-   3  21-30      6        101-150    1
                         3-    1     3     2        S1-2    6  A-   0 C-   2  31-40      2        151-200    0
                         4-    1     1     1        S3-4   21  E-   3         41-50      1           >200    0
                                                    S >5    0  I-   1          > 50      0         TOTAL   956      TOTAL       11

OTHER                    0-  217   169   178        Q1-2  111  L- 469 P-  61   1-10    705          1- 50 1117       IN-DPT    168
                         1-  544   590   577        Q3-4  243  R- 282 D-  43  11-20    328         51-100   93      OUT-DPT    543
                         2-  252   250   256        Q >5   73  T-   1 S- 113  21-30    145        101-150   37
                         3-  169   173   169        S1-2  173  A-  12 C-   1  31-40     54        151-200    8
                         4-   97    97    99        S3-4  598  E-  30         41-50     24           >200   24
                                                    S >5   26  I- 267          > 50     23         TOTAL 38168      TOTAL      710

DESCRIPTION NOT CODED    0-  119   173   208        Q1-2   34  L- 426 P-   2   1-10    296          1- 50  420       IN-DPT     40
                         1-  256   212   198        Q3-4  106  R-  87 D-   4  11-20     97         51-100   59      OUT-DPT     35
                         2-  105   104    91        Q >5   33  T-   0 S-  11  21-30     84        101-150   24
                         3-   36    35    28        S1-2   62  A-   3 C-   1  31-40     24        151-200   17
                         4-   33    27    26        S3-4  308  E-   1         41-50     38           >200   31
                                                    S >5    5  I-  16          > 50     12         TOTAL 30063      TOTAL       75
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                  PAGE X-08

                                           SUMMARY BY COURSE TYPE
     GROUP (PUBLIC:                    )
                           NUMBER  OF  TERMS          CR HOURS                              **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
  COURSE DESCRIPTION           OFFERED                QTR AND                                    SECT      * 1976-77  * 1976-77 (THOUS$)
                         76-77 77-78 78-79            SEMESTER   MODE OF OPER     NO.    SIZE      * NO.  FREQ* ON AND OFF-CAMPUS

COMPUTER APPRECIATION    0-  15    12    17           Q1-2    8  L-  90 P-   6   1-10    31        1- 50  109        IN-DPT     67
                         1-  62    75    71           Q3-4   49  R-  87 D-   0  11-20    51       51-100   48       OUT-DPT     54
                         2-  80    71    67           Q >5    6  T-   2 S-   3  21-30    86      101-150   22
                         3-  54    52    52           S1-2   28  A-  20 C-   0  31-40    29      151-200   12
                         4-  20    20    24           S3-4  114  E-  21            41-50     7         >200   42
                                                      S >5    2  I-   4            > 50    29       TOTAL  27793       TOTAL     120

PROBLEM SOLVING COURSE   0-   5     5    17           Q1-2    2  L-  38 P-   0   1-10    27        1- 50   71        IN-DPT      1
 IN THE HUMANITIES       1-  51    43    35           Q3-4   19  R-  32 D-   0  11-20    31       51-100    9       OUT-DPT     26
                         2-  24    30    26           Q >5    3  T-   0 S-   5  21-30    21      101-150    2
                         3-   6     8     7           S1-2    3  A-   6 C-   0  31-40     3      151-200    1
                         4-   3     3     4           S3-4   60  E-   5            41-50     2         >200    6
                                                      S >5    1  I-   3            > 50     5       TOTAL   4351       TOTAL      28

INTRODUCTORY COURSE IN   0-  60    44    54           Q1-2   40  L- 232 P-  10   1-10   139        1- 50  554        IN-DPT    674
 SOME COMPILER LANGUAGE  1- 334   350   343           Q3-4  248  R- 677 D-   0  11-20   323       51-100  178       OUT-DPT   1495
 SUCH AS FORTRAN, PL/1,  2- 301   291   286           Q >5   59  T-   2 S-   0  21-30   328      101-150   87
 BASIC, ALGOL            3- 217   219   225           S1-2  127  A-  14 C-   1  31-40   126      151-200   54
                         4- 110   116   111           S3-4  466  E-  79            41-50    52         >200  156
                                                      S >5    3  I-  14            > 50    61       TOTAL 130563       TOTAL    2169

INTRODUCTORY COURSE IN A 0-  33    25    26           Q1-2    9  L-  95 P-   5   1-10    89        1- 50  329        IN-DPT    165
 LANGUAGE SUCH AS COBOL  1- 244   234   235           Q3-4  135  R- 401 D-   0  11-20   194       51-100  116       OUT-DPT    281
                         2- 157   178   173           Q >5   32  T-   1 S-   0  21-30   189      101-150   60
                         3-  95    94    95           S1-2   31  A-   6 C-   0  31-40    59      151-200   22
                         4-  35    33    35           S3-4  332  E-  48            41-50    21         >200   38
                                                      S >5    2  I-   9            > 50    13       TOTAL  44190       TOTAL     446

PROBLEM SOLVING COURSE   0-  16    16    25           Q1-2   14  L-  90 P-   6   1-10    80        1- 50  210        IN-DPT     28
 IN ENGINEERING OR       1- 153   149   147           Q3-4   47  R- 127 D-   3  11-20   105       51-100   47       OUT-DPT     74
 SCIENTIFIC APPLI-       2-  85    94    85           Q >5    2  T-   1 S-   1  21-30    61      101-150   13
 CATIONS                 3-  26    22    24           S1-2   27  A-  22 C-   0  31-40    21      151-200    6
                         4-   9     8     8           S3-4  164  E-  32            41-50     9         >200   13
                                                      S >5    5  I-   7            > 50    13       TOTAL  14960       TOTAL     102

INTRODUCTORY COURSE IN   0-  15    25    38           Q1-2    6  L-  95 P-   3   1-10    56        1- 50  187        IN-DPT    314
 PROGRAMMING             1- 120   116    97           Q3-4  106  R- 247 D-   0  11-20   103       51-100   76       OUT-DPT    816
                         2- 137   126   127           Q >5   27  T-   0 S-   1  21-30   124      101-150   47
                         3-  94    96    94           S1-2   21  A-  12 C-   0  31-40    69      151-200   20
                         4-  38    41    48           S3-4  228  E-  43            41-50    23         >200   76
                                                      S >5    5  I-   5            > 50    31       TOTAL  98167       TOTAL    1130

ADVANCED COURSE IN       0-  69    49    50           Q1-2   12  L- 142 P-  15   1-10   207        1- 50  549        IN-DPT    256
 PROGRAMMING             1- 339   352   349           Q3-4  171  R- 455 D-   0  11-20   277       51-100  102       OUT-DPT    502
                         2- 207   200   195           Q >5   55  T-   0 S-   2  21-30   166      101-150   36
                         3-  80    88    93           S1-2   20  A-   9 C-   0  31-40    43      151-200   15
                         4-  21    27    29           S3-4  423  E-  60            41-50    10         >200   14
                                                      S >5    9  I-  33            > 50    13       TOTAL  29579       TOTAL     758

FIRST COURSE IN COMPUTER 0-  10     7     9           Q1-2    2  L-  53 P-   5   1-10    26        1- 50   68        IN-DPT     15
 DESIGN                  1-  50    52    48           Q3-4   30  R-  50 D-   0  11-20    31       51-100   23       OUT-DPT     25
                         2-  28    30    32           Q >5    7  T-   0 S-   0  21-30    24      101-150   11
                         3-  23    21    22           S1-2    5  A-   1 C-   0  31-40    16      151-200    5
                         4-   4     5     4           S3-4   65  E-   4            41-50    13         >200    9
                                                      S >5    0  I-   3            > 50     6       TOTAL   8404       TOTAL      40

ADVANCED COURSE IN COM-  0-  24    15    18           Q1-2    1  L-  67 P-   7   1-10    55        1- 50  118        IN-DPT     97
 PUTER DESIGN (COMPUTER  1-  76    81    78           Q3-4   45  R-  54 D-   0  11-20    34       51-100   14       OUT-DPT     28
 ARCHITECTURE)           2-  24    27    27           Q >5    2  T-   0 S-   7  21-30    35      101-150    4
                         3-  13    14    14           S1-2    4  A-   2 C-   0  31-40     7      151-200    3
                         4-   3     3     3           S3-4   87  E-   3            41-50     4         >200    1
                                                      S >5    1  I-   0            > 50     5       TOTAL   4136       TOTAL     124

PROGRAMMING LANGUAGES    0-  39    35    33           Q1-2    3  L- 130 P-   5   1-10    79        1- 50  228        IN-DPT    122
 (STRUCTURE, ETC.)       1- 169   169   169           Q3-4   64  R- 117 D-   0  11-20   104       51-100   47       OUT-DPT    149
                         2-  49    53    59           Q >5   23  T-   0 S-   6  21-30    70      101-150   12
                         3-  31    31    27           S1-2    5  A-   3 C-   2  31-40    16      151-200    5
                         4-   8     8     8           S3-4  173  E-  25            41-50    19         >200    4
                                                      S >5    7  I-   8            > 50     8       TOTAL  10841       TOTAL     271

OPERATING SYSTEMS        0-  62    47    39           Q1-2    6  L- 210 P-   0   1-10   134        1- 50  346        IN-DPT    206
 (SYSTEMS PROGRAMMING,   1- 246   256   258           Q3-4  120  R- 166 D-   0  11-20   132       51-100   40       OUT-DPT    155
  ETC.)                  2-  75    75    81           Q >5   23  T-   1 S-   2  21-30    95      101-150   22
                         3-  26    31    28           S1-2   13  A-   9 C-   0  31-40    34      151-200    3
                         4-   6     6     9           S3-4  235  E-  23            41-50    12         >200    4
                                                      S >5    1  I-   4            > 50     8       TOTAL  13293       TOTAL     361

DATA STRUCTURES          0-  30    25    18           Q1-2    3  L- 112 P-   0   1-10    53        1- 50  147        IN-DPT     70
                         1- 104   104   108           Q3-4   63  R-  71 D-   0  11-20    68       51-100   29       OUT-DPT    153
                         2-  39    43    43           Q >5   12  T-   0 S-   1  21-30    46      101-150   12
                         3-  20    21    24           S1-2    1  A-   6 C-   0  31-40    16      151-200    8
                         4-   6     6     6           S3-4  113  E-   9            41-50    12         >200    3
                                                      S >5    0  I-   0            > 50     4       TOTAL   7991       TOTAL     223
                                           SUMMARY BY COURSE TYPE
                                       1    CONTINUED
  GROUP (PUBLIC)                                                                    **  AVERAGE **  *ENROLLMENT* COST COMPUTER SVCS
                           NUMBER  OF  TERMS        CR HOURS                                 SECT     * 1976-77  * 1976-77 (THOUS$)
  COURSE DESCRIPTION            OFFERED             QTR AND                                            * NO.  FREQ* ON AND OFF-CAMPUS
                          76-77 77-78 78-79         SEMESTER    MODE OF OPER       NO.   SIZE

AUTOMATA THEORY            0-  22   14   17         Q1-2    0  L-  60 P-   0   1-10   35        1- 50   67     IN-DPT     0
                           1-  36   43   41         Q3-4   26  R-  13 D-   0  11-20   23       51-100    6     OUT-DPT    8
                           2-  15   16   15         Q >5    5  T-   0 S-   2  21-30   13      101-150    3
                           3-   4    4    4         S1-2    1  A-   0 C-   0  31-40    3      151-200    1
                           4-   0    0    0         S3-4   44  E-   2         41-50    2        >200     0
                                                    S >5    0  I-   0          > 50    1       TOTAL  1786     TOTAL      8

SIMULATION APPLICATIONS    0-  12   10   11         Q1-2    1  L-  45 P-   0   1-10   30        1- 50   76     IN-DPT     4
 (NON-ECONOMETRIC)         1-  61   61   60         Q3-4   28  R-  24 D-   0  11-20   34       51-100    5     OUT-DPT   15
                           2-   9   11   11         Q >5    4  T-   0 S-   2  21-30   11      101-150    1
                           3-   1    1    1         S1-2    2  A-   6 C-   0  31-40    5      151-200    0
                           4-   0    0    0         S3-4   43  E-   4         41-50    3        >200     1
                                                    S >5    0  I-   2          > 50    0       TOTAL  1920     TOTAL     19

SIMULATION LANGUAGES       0-  16   18   15         Q1-2    0  L-  63 P-   0   1-10   43        1- 50  102     IN-DPT    27
 AND/OR TECHNIQUES         1-  80   80   81         Q3-4   35  R-  40 D-   0  11-20   35       51-100    9     OUT-DPT   51
                           2-  15   13   15         Q >5    1  T-   0 S-   3  21-30   26      101-150    2
                           3-   2    2    2         S1-2    2  A-   5 C-   0  31-40    5      151-200    0
                           4-   0    0    0         S3-4   67  E-   1         41-50    0        >200     0
                                                    S >5    0  I-   1          > 50    4       TOTAL  2227     TOTAL     78

ARTIFICIAL INTELLIGENCE    0-  33   34   27         Q1-2    0  L-  89 P-   1   1-10   67        1- 50  119     IN-DPT     2
 (HEURISTIC PROGRAMMING)   1-  74   73   80         Q3-4   43  R-  14 D-   0  11-20   36       51-100    4     OUT-DPT   35
                           2-  13   14   14         Q >5    4  T-   0 S-  12  21-30   14      101-150    0
                           3-   2    1    1         S1-2    2  A-   3 C-   0  31-40    4      151-200    0
                           4-   1    1    1         S3-4   72  E-   2         41-50    0        >200     0
                                                    S >5    0  I-   2          > 50    2       TOTAL  1540     TOTAL     37

HYBRID COMPUTERS           0-   5    3    2         Q1-2    0  L-   3 P-   0   1-10    7        1- 50   18     IN-DPT     0
                           1-  10   12   13         Q3-4    6  R-  12 D-   0  11-20    9       51-100    1     OUT-DPT    0
                           2-   2    2    2         Q >5    1  T-   0 S-   0  21-30    3      101-150    0
                           3-   1    1    1         S1-2    2  A-   3 C-   0  31-40    0      151-200    0
                           4-   1    1    1         S3-4   10  E-   1         41-50    0        >200     0
                                                    S >5    0  I-   0          > 50    0       TOTAL   263     TOTAL      0

DISCRETE STRUCTURES        0-  17   10   13         Q1-2    3  L-  71 P-   0   1-10   25        1- 50   61     IN-DPT     0
                           1-  36   45   40         Q3-4   20  R-   6 D-   0  11-20   25       51-100   15     OUT-DPT   17
                           2-  22   21   22         Q >5    4  T-   0 S-   1  21-30   18      101-150    7
                           3-  10    9   10         S1-2    3  A-   2 C-   0  31-40    9      151-200    1
                           4-   0    0    0         S3-4   49  E-   5         41-50    4        >200     1
                                                    S >5    0  I-   0          > 50    4       TOTAL  3363     TOTAL     17

COMPUTER ORGANIZATION      0-  14   16   12         Q1-2    5  L-  57 P-   3   1-10   29        1- 50  101     IN-DPT    16
                           1-  72   69   74         Q3-4   39  R-  50 D-   0  11-20   49       51-100   18     OUT-DPT   45
                           2-  28   26   25         Q >5    7  T-   1 S-   2  21-30   30      101-150    5
                           3-   7    9   10         S1-2    5  A-   6 C-   0  31-40   12      151-200    0
                           4-   4    4    4         S3-4   63  E-   5         41-50    2        >200     1
                                                    S >5    0  I-   1          > 50    3       TOTAL  4046     TOTAL     61

SWITCHING THEORY           0-  11   12    7         Q1-2    1  L-  47 P-   4   1-10   21        1- 50   53     IN-DPT     2
                           1-  38   37   42         Q3-4   21  R-  13 D-   0  11-20   22       51-100    7     OUT-DPT    2
                           2-  12   13   12         Q >5    0  T-   0 S-   0  21-30    9      101-150    4
                           3-   3    3    4         S1-2    4  A-   0 C-   0  31-40    9      151-200    1
                           4-   2    1    1         S3-4   39  E-   2         41-50    1        >200     1
                                                    S >5    0  I-   0          > 50    4       TOTAL  2235     TOTAL      3

SEQUENTIAL MACHINES        0-   3    6    1         Q1-2    0  L-  16 P-   0   1-10   10        1- 50   19     IN-DPT     0
                           1-  13   10   15         Q3-4   12  R-   6 D-   0  11-20    7       51-100    4     OUT-DPT    1
                           2-   4    4    4         Q >5    1  T-   0 S-   0  21-30    3      101-150    0
                           3-   2    2    2         S1-2    0  A-   1 C-   0  31-40    3      151-200    0
                           4-   1    1    1         S3-4    9  E-   0         41-50    0        >200     0
                                                    S >5    0  I-   0          > 50    0       TOTAL   582     TOTAL      1

COMPILER CONSTRUCTION      0-  33   31   26         Q1-2    2  L-  86 P-   3   1-10   60        1- 50  139     IN-DPT    62
                           1-  97  101  103         Q3-4   57  R-  55 D-   0  11-20   45       51-100   11     OUT-DPT  146
                           2-  17   12   16         Q >5    6  T-   0 S-   2  21-30   31      101-150    3
                           3-   5    8    7         S1-2    1  A-   2 C-   0  31-40   11      151-200    0
                           4-   1    1    1         S3-4   84  E-   5         41-50    2        >200     0
                                                    S >5    0  I-   0          > 50    4       TOTAL  3156     TOTAL    209

FORMAL LANGUAGES AND       0-  22   19   13         Q1-2    1  L-  63 P-   0   1-10   45        1- 50   84     IN-DPT    67
 SYNTACTIC ANALYSIS        1-  58   60   66         Q3-4   39  R-  17 D-   0  11-20   27       51-100    5     OUT-DPT   31
                           2-   7    7    9         Q >5    5  T-   0 S-   3  21-30   13      101-150    2
                           3-   1    2    0         S1-2    1  A-   3 C-   1  31-40    4      151-200    0
                           4-   3    3    3         S3-4   43  E-   4         41-50    0        >200     0
                                                    S >5    0  I-   0          > 50    2       TOTAL  1500     TOTAL     98

INTRODUCTORY COMPUTER      0-  14   10   14         Q1-2    4  L-  64 P-   5   1-10   23        1- 50   73     IN-DPT    11
 ORGANIZATION              1-  58   60   54         Q3-4   36  R-  37 D-   0  11-20   32       51-100   23     OUT-DPT   51
                           2-  32   33   35         Q >5    3  T-   0 S-   0  21-30   27      101-150    8
                           3-   8    9    9         S1-2    5  A-   1 C-   0  31-40   19      151-200    5
                           4-   2    2    2         S3-4   52  E-   8         41-50    7        >200     6
                                                    S >5    0  I-   0          > 50    7       TOTAL  6884     TOTAL     62
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INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, ANC INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATICN FOR 1976-77
CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

SUMMARY BY COURSE TYPE
CONTINUED

GROUP (PUBLIC;)

COURSE DESCRIPTION	NUMBER OF TERMS OFFERED	76-77	77-78	78-79	CR HOURS QTR AND SEMESTER		MCDE CF OPER				** AVERAGE NO.	SECT SIZE **	*ENRCLLMENT* * 1976-77 * NO.	FREQ	CCST COMPUTER SVCS * 1976-77 (THOUS$) ON ANC OFF-CAMPUS	
ADVANCED COMPUTER ORGANIZATION	0-	15	3	9	Q1-2	1	L-	36	P-	1	1-10	26	1- 50	62	IN-DPT	8
	1-	38	50	42	Q3-4	22	R-	19	D-	0	11-20	20	51-100	3	OUT-DPT	24
	2-	12	11	13	Q >5	1	T-	1	S-	2	21-30	12	101-150	1		
	3-	1	2	2	S1-2	1	A-	2	C-	0	31-40	5	151-200	0		
	4-	0	0	0	S3-4	39	E-	5			41-50	1	>200	0		
					S >5	0	I-	0			> 50	2	TCTAL	1249	TOTAL	31
INFORMATION STORAGE AND RETRIEVAL	0-	14	11	7	Q1-2	1	L-	30	P-	0	1-10	23	1- 50	53	IN-DPT	58
	1-	32	35	36	Q3-4	13	R-	24	D-	0	11-20	18	51-100	2	CUT-DPT	24
	2-	10	9	12	Q >5	9	T-	0	S-	0	21-30	9	101-150	1		
	3-	1	2	2	S1-2	1	A-	3	C-	0	31-40	6	151-200	1		
	4-	1	1	1	S3-4	33	E-	1			41-50	1	>200	1		
					S >5	0	I-	0			> 50	1	TOTAL	1626	TOTAL	82
COMPUTER GRAPHICS	0-	18	8	15	Q1-2	2	L-	34	P-	1	1-10	27	1- 50	70	IN-DPT	11
	1-	42	52	44	Q3-4	23	R-	26	D-	0	11-20	26	51-100	2	OUT-DPT	50
	2-	10	10	11	Q >5	2	T-	0	S-	1	21-30	13	101-150	0		
	3-	2	2	2	S1-2	6	A-	3	C-	2	31-40	5	151-200	0		
	4-	0	0	0	S3-4	37	E-	3			41-50	0	>200	0		
					S >5	0	I-	2			> 50	1	TOTAL	1217	TOTAL	61
COMPUTABILITY	0-	21	16	14	Q1-2	1	L-	54	P-	0	1-10	41	1- 50	66	IN-DPT	1
	1-	39	43	47	Q3-4	15	R-	8	D-	0	11-20	18	51-100	2	OUT-DPT	2
	2-	9	10	8	Q >5	1	T-	0	S-	4	21-30	8	101-150	1		
	3-	1	1	1	S1-2	1	A-	1	C-	1	31-40	1	151-200	1		
	4-	0	0	0	S3-4	52	E-	1			41-50	1	>200	0		
					S >5	0	I-	1			> 50	1	TOTAL	999	TOTAL	3
INTRODUCTORY NUMERICAL ANALYSIS (CR METHCDS)	0-	15	20	21	Q1-2	2	L-	135	P-	2	1-10	65	1- 50	184	IN-DPT	42
	1-	148	137	142	Q3-4	44	R-	66	D-	0	11-20	88	51-100	18	OUT-CPT	59
	2-	36	43	38	Q >5	6	T-	1	S-	1	21-30	41	101-150	10		
	3-	18	16	16	S1-2	6	A-	10	C-	0	31-40	16	151-200	4		
	4-	3	4	3	S3-4	139	E-	4			41-50	5	>200	4		
					S >5	2	I-	1			> 50	5	TOTAL	7422	TOTAL	101
ADVANCED NUMERICAL ANALYSIS	0-	51	36	44	Q1-2	2	L-	147	P-	0	1-10	109	1- 50	181	IN-DPT	23
	1-	111	120	115	Q3-4	47	R-	29	D-	0	11-20	51	51-100	5	CUT-DPT	39
	2-	17	22	19	Q >5	12	T-	0	S-	1	21-30	23	101-150	0		
	3-	7	8	8	S1-2	2	A-	5	C-	0	31-40	2	151-200	1		
	4-	1	1	1	S3-4	117	E-	2			41-50	2	>200	0		
					S >5	1	I-	3			> 50	0	TOTAL	2531	TOTAL	62
INTRODUCTORY OPERATIONS RESEARCH	0-	20	13	10	Q1-2	2	L-	70	P-	0	1-10	34	1- 50	87	IN-DPT	6
	1-	59	62	67	Q3-4	21	R-	27	D-	0	11-20	35	51-100	8	OUT-DPT	13
	2-	16	20	18	Q >5	4	T-	1	S-	0	21-30	30	101-150	7		
	3-	8	8	9	S1-2	0	A-	3	C-	0	31-40	4	151-200	1		
	4-	3	3	2	S3-4	77	E-	4			41-50	1	>200	3		
					S >5	0	I-	1			> 50	2	TOTAL	5471	TOTAL	18
ADVANCED OPERATIONS RESEARCH	0-	15	12	13	Q1-2	1	L-	70	P-	1	1-10	40	1- 50	77	IN-DPT	0
	1-	56	60	60	Q3-4	19	R-	13	D-	0	11-20	29	51-100	5	OUT-DPT	35
	2-	11	11	9	Q >5	4	T-	0	S-	0	21-30	12	101-150	4		
	3-	5	4	5	S1-2	3	A-	1	C-	0	31-40	5	151-200	0		
	4-	0	0	0	S3-4	57	E-	1			41-50	1	>200	1		
					S >5	0	I-	1			> 50	0	TOTAL	3264	TOTAL	36
DATA COMMUNICATIONS	0-	15	17	8	Q1-2	3	L-	44	P-	0	1-10	22	1- 50	74	IN-DPT	15
	1-	54	51	61	Q3-4	34	R-	23	D-	0	11-20	35	51-100	7	OUT-DPT	13
	2-	13	14	13	Q >5	5	T-	0	S-	0	21-30	20	101-150	2		
	3-	0	0	0	S1-2	2	A-	6	C-	0	31-40	5	151-200	0		
	4-	1	1	1	S3-4	39	E-	9			41-50	1	>200	0		
					S >5	0	I-	1			> 50	0	TOTAL	1988	TOTAL	28
PROCESS CONTROL	0-	4	7	3	Q1-2	0	L-	17	P-	0	1-10	11	1- 50	32	IN-DPT	507
	1-	22	18	21	Q3-4	9	R-	17	D-	0	11-20	16	51-10C	2	OUT-DPT	7
	2-	6	6	6	Q >5	0	T-	0	S-	0	21-30	6	101-150	0		
	3-	1	2	3	S1-2	2	A-	0	C-	1	31-40	1	151-200	0		
	4-	1	2	2	S3-4	22	E-	0			41-50	0	>200	1		
					S >5	1	I-	0			> 50	1	TCTAL	8559	TOTAL	515
DATA PREPARATION (KEY PUNCH, VERIFIER, DATA ENTRY,...)	0-	3	5	7	Q1-2	11	L-	4	P-	20	1-10	35	1- 50	68	IN-DPT	76
	1-	27	23	23	Q3-4	22	R-	66	D-	0	11-20	45	51-100	25	OUT-DPT	38
	2-	35	39	34	Q >5	4	T-	1	S-	0	21-30	20	101-150	9		
	3-	24	19	21	S1-2	37	A-	0	C-	0	31-40	8	151-200	6		
	4-	19	22	23	S3-4	33	E-	8			41-50	0	>200	1		
					S >5	1	I-	10			> 50	1	TOTAL	6133	TOTAL	113
UNIT RECORC (EAM)	0-	3	4	5	Q1-2	2	L-	6	P-	1	1-10	3	1- 50	18	IN-DPT	0
	1-	15	15	13	Q3-4	5	R-	17	D-	0	11-20	9	51-100	6	OUT-DPT	5
	2-	4	4	6	Q >5	1	T-	0	S-	0	21-30	8	101-150	2		
	3-	4	3	2	S1-2	4	A-	0	C-	0	31-40	6	151-200	0		
	4-	1	1	1	S3-4	10	E-	3			41-50	1	>200	1		
					S >5	0	I-	0			> 50	0	TOTAL	1421	TOTAL	5

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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
               CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                    PAGE X-11

                                                   SUMMARY BY COURSE TYPE
    GROUP (PUBLIC;                          )      CONTINUED
                              NUMBER  OF  TERMS    CR HOURS                          **  AVERAGE **  *ENROLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTION               OFFERED          QTR AND                                    SECT   * 1976-77  * 1976-77 (THOUS$)
                             76-77 77-78 78-79     SEMESTER    MODE OF OPER         NO.   SIZE      * NO.  FREQ* ON AND OFF-CAMPUS

INTRODUCTORY COURSE        0-  11    10    11      Q1-2     5  L- 121 P-   2    1-10   31      1- 50   114     IN-DPT     336
 IN DATA PROCESSING        1-  79    78    73      Q3-4    88  R- 171 D-   0   11-20   84     51-100    59     OUT-DPT    362
                           2- 105    95   101      Q >5    18  T-   2 S-   1   21-30  134    101-150    39
                           3- 114   125   123      S1-2    22  A-  27 C-   0   31-40   74    151-200    27
                           4-  64    65    65      S3-4   215  E-  46          41-50   29       >200   137
                                                   S >5     8  I-   6           > 50   24      TOTAL 90995     TOTAL      698

ADVANCED COURSE IN DATA    0-  14     7    10      Q1-2     1  L-  24 P-   3    1-10   32      1- 50    76     IN-DPT       9
 PROCESSING                1-  48    53    51      Q3-4    23  R-  59 D-   0   11-20   33     51-100    17     OUT-DPT     16
                           2-  29    28    26      Q >5     4  T-   0 S-   2   21-30   24    101-150     3
                           3-  13    16    15      S1-2    17  A-   2 C-   0   31-40   15    151-200     7
                           4-   1     1     3      S3-4    56  E-   5          41-50    1       >200     2
                                                   S >5     0  I-  10           > 50    0      TOTAL  4772     TOTAL       25

PROBLEM SOLVING COURSE     0-  11    15    19      Q1-2     8  L-  68 P-  11    1-10   66      1- 50   133     IN-DPT      18
 IN BUSINESS APPLI-        1-  89    87    85      Q3-4    44  R-  57 D-   0   11-20   53     51-100    22     OUT-DPT     79
 CATIONS                   2-  52    51    50      Q >5    14  T-   0 S-   4   21-30   44    101-150     9
                           3-  15    13    12      S1-2     6  A-  10 C-   0   31-40   15    151-200     3
                           4-  12    13    13      S3-4    97  E-   9          41-50    0       >200    12
                                                   S >5     2  I-  20           > 50    1      TOTAL 12356     TOTAL       97

ADVANCED BUSINESS APPLI-   0-   7    11     9      Q1-2     6  L-  33 P-   3    1-10   36      1- 50    75     IN-DPT      16
 CATIONS (MARKETING,       1-  49    44    46      Q3-4    16  R-  37 D-   0   11-20   38     51-100     9     OUT-DPT     18
 FINANCE, PRODUCTION,      2-  24    20    23      Q >5     6  T-   0 S-   1   21-30   16    101-150     3
 ETC.)                     3-  14    16    14      S1-2     4  A-   4 C-   1   31-40    1    151-200     5
                           4-   0     3     2      S3-4    60  E-   5          41-50    1       >200     2
                                                   S >5     1  I-  10           > 50    2      TOTAL  3684     TOTAL       34

INTRODUCTORY SYSTEMS       0-  22    13    12      Q1-2     3  L-  87 P-   1    1-10   47      1- 50   176     IN-DPT      27
 ANALYSIS (BUSINESS)       1- 127   131   131      Q3-4    65  R-  85 D-   0   11-20   91     51-100    31     OUT-DPT     13
                           2-  50    54    53      Q >5    18  T-   1 S-   2   21-30   63    101-150     7
                           3-  16    16    17      S1-2     1  A-  31 C-   0   31-40   18    151-200     3
                           4-   9    10    11      S3-4   131  E-  16          41-50    3       >200     7
                                                   S >5     2  I-   1           > 50    2      TOTAL  9931     TOTAL       39

LARGE SCALE INFORMATION    0-   6     1     2      Q1-2     0  L-   7 P-   0    1-10   10      1- 50    24     IN-DPT       3
 PROCESSING SYSTEMS        1-  13    17    15      Q3-4     7  R-  14 D-   0   11-20    8     51-100     4     OUT-DPT     13
                           2-   6     6     7      Q >5     2  T-   0 S-   1   21-30    4    101-150     0
                           3-   3     4     3      S1-2     0  A-   2 C-   0   31-40    3    151-200     0
                           4-   0     0     1      S3-4    18  E-   4          41-50    3       >200     0
                                                   S >5     0  I-   0           > 50    0      TOTAL   730     TOTAL       16

FILE ORGANIZATION          0-   8     6     2      Q1-2     0  L-  20 P-   0    1-10   13      1- 50    42     IN-DPT      39
                           1-  27    25    27      Q3-4    19  R-  18 D-   0   11-20   15     51-100     4     OUT-DPT     19
                           2-  12    13    15      Q >5     2  T-   1 S-   0   21-30   12    101-150     2
                           3-   2     5     5      S1-2     0  A-   4 C-   0   31-40    7    151-200     1
                           4-   0     0     0      S3-4    25  E-   6          41-50    1       >200     0
                                                   S >5     0  I-   0           > 50    1      TOTAL  1543     TOTAL       58

DATA BASE MANAGEMENT       0-  30    13     6      Q1-2     4  L-  63 P-   1    1-10   38      1- 50    96     IN-DPT      36
                           1-  59    72    77      Q3-4    37  R-  28 D-   0   11-20   33     51-100    14     OUT-DPT     40
                           2-  17    19    23      Q >5     3  T-   0 S-   3   21-30   26    101-150     2
                           3-   5     7     5      S1-2     1  A-   7 C-   0   31-40    7    151-200     0
                           4-   1     1     1      S3-4    64  E-  10          41-50    6       >200     0
                                                   S >5     0  I-   0           > 50    2      TOTAL  2685     TOTAL       77

INFORMATION SYSTEMS        0-  18     5    10      Q1-2     5  L-  49 P-   1    1-10   42      1- 50   110     IN-DPT      23
 DESIGN (INTRODUCTORY)     1-  81    93    90      Q3-4    41  R-  66 D-   1   11-20   51     51-100    19     OUT-DPT     32
                           2-  25    25    21      Q >5     6  T-   1 S-   2   21-30   28    101-150     6
                           3-  13    14    16      S1-2     4  A-   6 C-   0   31-40   11    151-200     2
                           4-   2     2     2      S3-4    79  E-  11          41-50    5       >200     2
                                                   S >5     1  I-   2           > 50    2      TOTAL  5263     TOTAL       55

INFORMATION SYSTEMS        0-  13     8     7      Q1-2     1  L-  34 P-   3    1-10   41      1- 50    87     IN-DPT      10
 DESIGN (ADVANCED)         1-  68    71    71      Q3-4    36  R-  43 D-   0   11-20   34     51-100     9     OUT-DPT     29
                           2-  11    13    11      Q >5     6  T-   1 S-   1   21-30   16    101-150     2
                           3-   4     3     6      S1-2     0  A-   4 C-   0   31-40    5    151-200     1
                           4-   3     4     4      S3-4    52  E-   8          41-50    2       >200     0
                                                   S >5     1  I-   5           > 50    1      TOTAL  2374     TOTAL       40

MANAGEMENT INFORMATION     0-  10     8     6      Q1-2     0  L-  38 P-   0    1-10   18      1- 50    64     IN-DPT      43
 SYSTEMS                   1-  45    49    51      Q3-4    25  R-  21 D-   0   11-20   27     51-100    10     OUT-DPT     26
                           2-  15    12    12      Q >5     1  T-   0 S-   4   21-30   23    101-150     3
                           3-   7     9     9      S1-2     2  A-  15 C-   0   31-40   10    151-200     0
                           4-   4     3     3      S3-4    47  E-   2          41-50    0       >200     4
                                                   S >5     1  I-   1           > 50    3      TOTAL  3858     TOTAL       69

MANAGEMENT OF COMPUTER     0-  14     6     6      Q1-2     1  L-  26 P-   4    1-10   26      1- 50    47     IN-DPT       6
 CENTERS OF INFORMATION    1-  26    33    31      Q3-4    16  R-  14 D-   0   11-20   16     51-100     9     OUT-DPT      2
   PROCESSING DEPARTMENTS  2-  11    12    13      Q >5     0  T-   0 S-   3   21-30   12    101-150     2
                           3-   6     7     8      S1-2     3  A-   9 C-   0   31-40    1    151-200     1
                           4-   2     1     1      S3-4    37  E-   2          41-50    4       >200     0
                                                   S >5     0  I-   1           > 50    0      TOTAL  1703     TOTAL        7
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                                                      SUMMARY BY COURSE TYPE
     GROUP (PUBLIC)                             )     CONTINUED
                              NUMBER  OF  TERMS          CR HCURS                          **  AVERAGE **  *ENROLLMENT* COST COMPUTER SVCS
   COURSE DESCRIPTION              OFFERED               QTR  AND                               SECT       * 1976-77   * 1976-77 (THOUS$)
                              76-77 77-78 78-79          SEMESTER    MODE OF OPER       NO.   SIZE       * NO.  FREQ* ON AND OFF-CAMPUS

COMPUTERS AND ACCOUNTING 0-    5     8    10             Q1-2     1  L-  16 P-   0   1-10      6         1- 50   26        IN-DPT      83
 (INCLUDING AUDITING)    1-   16    10     8             Q3-4     4  R-  13 D-   0  11-20     12        51-100    7       OUT-DPT       5
                         2-   12    16    16             Q >5     2  T-   0 S-   2  21-30     16       101-150    3
                         3-    4     3     3             S1-2     3  A-   0 C-   1  31-40      3       151-200    1
                         4-    2     2     2             S3-4    27  E-   6         41-50      1          >200    2
                                                         S >5     0  I-   1          > 50      1         TOTAL 2197       TOTAL        88

ECONOMETRIC SIMULATION   0-    4     6     5             Q1-2     0  L-   8 P-   0   1-10      9         1- 50   16        IN-DPT       0
 APPLICATIONS            1-    9     8     7             Q3-4     7  R-   4 D-   0  11-20      5        51-10C    1       OUT-DPT       0
                         2-    4     2     4             Q >5     2  T-   0 S-   1  21-30      3       101-150    0
                         3-    0     1     1             S1-2     0  A-   2 C-   0  31-40      0       151-20C    0
                         4-    0     0     0             S3-4     8  E-   2         41-50      0          >200    0
                                                         S >5     0  I-   0          > 50      0         TOTAL  273       TOTAL         0

INSTRUCTIONAL DESIGN     0-    0     1     0             Q1-2     0  L-   1 P-   0   1-10      3         1- 5C    4        IN-DPT       0
                         1-    4     3     4             Q3-4     3  R-   3 D-   0  11-20      1        51-100    0       UUT-DPT       0
                         2-    0     0     0             Q >5     0  T-   0 S-   0  21-30      0       101-150    0
                         3-    0     0     0             S1-2     0  A-   0 C-   0  31-40      0       151-200    0
                         4-    0     0     0             S3-4     1  E-   0         41-50      0          >200    0
                                                         S >5     0  I-   0          > 50      0         TOTAL   36       TOTAL         0

INSTRUCTIONAL SYSTEMS    0-    3     3     2             Q1-2     0  L-   3 P-   2   1-10      7         1- 50   10        IN-DPT       5
                         1-    4     4     5             Q3-4     5  R-   4 D-   0  11-20      1        51-100    0       OUT-DPT       2
                         2-    4     4     4             Q >5     0  T-   0 S-   0  21-30      2       101-150    1
                         3-    0     0     0             S1-2     0  A-   0 C-   1  31-40      0       151-200    0
                         4-    0     0     0             S3-4     6  E-   1         41-50      0          >200    0
                                                         S >5     0  I-   0          > 50      1         TOTAL  214       TOTAL         7

COMPUTER BASEC           0-    3     5     3             Q1-2     0  L-  10 P-   0   1-10     15         1- 50   25        IN-DPT       7
INSTRUCTION              1-   18    16    18             Q3-4    12  R-  15 D-   0  11-20      9        51-100    4       OUT-DPT       5
                         2-    8     6     7             Q >5     2  T-   0 S-   2  21-30      4       101-150    1
                         3-    0     2     1             S1-2     3  A-   0 C-   1  31-40      1       151-200    0
                         4-    1     1     1             S3-4    13  E-   1         41-50      1          >200    0
                                                         S >5     0  I-   1          > 50      0         TOTAL  677       TOTAL        11

OTHER                    0-  170   127   149             Q1-2    96  L- 348 P-  56   1-10    538         1- 50  825        IN-DPT     137
                         1-  371   410   388             Q3-4   225  R- 191 D-  40  11-20    246        51-100   83       OUT-DPT     504
                         2-  184   182   186             Q >5    68  T-   1 S-  94  21-30    106       101-150   32
                         3-  150   156   150             S1-2   136  A-   8 C-   1  31-40     39       151-20C    8
                         4-   95    95    97             S3-4   411  E-  28         41-50     21          >200   22
                                                         S >5    18  I- 203          > 50     20         TOTAL 32027      TOTAL       641

DESCRIPTION NOT CODED    0-   58   113   139             Q1-2    33  L- 312 P-   2   1-10    194         1- 50  305        IN-DPT      40
                         1-  202   166   150             Q3-4    97  R-  79 D-   2  11-20     94        51-100   50       CUT-DPT      34
                         2-   99    97    85             Q >5    33  T-   0 S-   9  21-30     66       101-150   23
                         3-   31    23    25             S1-2    29  A-   3 C-   0  31-40     23       151-200   15
                         4-   32    25    25             S3-4   230  E-   1         41-50     37          >200   31
                                                         S >5     2  I-  16          > 50     10         TOTAL 28204      TOTAL        75
   INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PRCGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                       CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                                  UNDER A GRANT FRCM THE NATIONAL SCIENCE FOUNDATION                                PAGE X-13

                                                  SUMMARY BY COURSE TYPE
   GROUP (PRIVATE)                      1
                          NUMBER  OF  TERMS          CR HCURS                      **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTION           OFFERED                QTR AND                              SECT    * 1976-77  * 1976-77 (THOUS$)
                         76-77 77-78 78-79           SEMESTER   MODE OF OPER       NO.   SIZE    * NO.  FREQ* ON AND OFF-CAMPUS

COMPUTER APPRECIATION    0-  12    13    10          Q1-2     2  L-  30 P-   0   1-10    23      1- 50   63       IN-DPT     41
                         1-  38    36    40          Q3-4     3  R-  42 D-   0  11-20    20     51-100   14      OUT-DPT     12
                         2-  22    21    20          Q >5     1  T-   0 S-   0  21-30    29    101-150    2
                         3-  12    13    13          S1-2     8  A-   4 C-   1  31-40     9    151-200    1
                         4-   2     3     3          S3-4    52  E-   9         41-50     2       >200    6
                                                     S >5     0  I-   0          > 50     3     TOTAL  4967      TOTAL        53

PROBLEM SOLVING COURSE   0-  17    23    27          Q1-2     0  L-   6 P-   0   1-10    34      1- 50   63       IN-DPT     32
 IN THE HUMANITIES       1-  45    41    35          Q3-4     2  R-  20 D-   3  11-20    19     51-100   11      OUT-DPT     25
                         2-  12    11    14          Q >5     0  T-   0 S-   0  21-30    13    101-150    1
                         3-   4     3     2          S1-2     3  A-  23 C-  25  31-40     7    151-200    0
                         4-   0     0     0          S3-4    48  E-   1         41-50     3       >200    3
                                                     S >5     0  I-   0          > 50     2     TOTAL  2746      TOTAL        57

INTRODUCTORY COURSE IN   0-  41    23    33          Q1-2    18  L-  60 P-  10   1-10    84      1- 50  237       IN-DPT    430
 SOME COMPILER LANGUAGE  1- 143   142   135          Q3-4    24  R- 291 D-   0  11-20   111     51-100   70      OUT-DPT    365
 SUCH AS FORTRAN, PL/1,  2- 109   120   114          Q >5     6  T-   0 S-   1  21-30   106    101-150   33
 BASIC, ALGOL            3-  76    83    86          S1-2    62  A-   5 C-   0  31-40    51    151-200   20
                         4-  18    19    19          S3-4   206  E-  21         41-50    20       >200   31
                                                     S >5     2  I-   3          > 50    19     TOTAL 30480      TOTAL       796

INTRODUCTORY COURSE IN A 0-  27    16     9          Q1-2     4  L-  19 P-   2   1-10    57      1- 50  124       IN-DPT     80
 LANGUAGE SUCH AS COBOL  1-  78    80    82          Q3-4    12  R- 108 D-   0  11-20    46     51-100   11      OUT-DPT    129
                         2-  30    37    39          Q >5     6  T-   0 S-   1  21-30    35    101-150    5
                         3-  11    12    15          S1-2    10  A-   3 C-   0  31-40     4    151-200    4
                         4-   0     1     1          S3-4    96  E-  12         41-50     3       >200    2
                                                     S >5     0  I-   1          > 50     1     TOTAL  5025      TOTAL       209

PROBLEM SCLVING COURSE   0-  34    70    66          Q1-2     4  L-  32 P-   2   1-10    85      1- 50  186       IN-DPT    117
 IN ENGINEERING OR       1- 137   109   113          Q3-4     6  R- 109 D-  16  11-20    67     51-100   25      OUT-DPT     27
 SCIENTIFIC APPLI-       2-  30    24    23          Q >5     2  T-   0 S-   3  21-30    34    101-150    0
 CATIONS                 3-  13    12    13          S1-2    14  A-  23 C-   0  31-40    24    151-200    1
                         4-   1     0     0          S3-4   162  E-   5         41-50     2       >200    3
                                                     S >5     3  I-  25          > 50     3     TOTAL  5545      TOTAL       144

INTRODUCTORY COURSE IN   0-   9     7     9          Q1-2     3  L-  24 P-   1   1-10    31      1- 50   83       IN-DPT    130
 PROGRAMMING             1-  53    51    53          Q3-4    12  R- 107 D-   0  11-20    31     51-100   32      OUT-DPT    136
                         2-  53    54    48          Q >5     5  T-   0 S-   0  21-30    49    101-150   10
                         3-  23    25    28          S1-2    16  A-   2 C-   0  31-40    17    151-200    8
                         4-   3     4     3          S3-4    77  E-   8         41-50     8       >200    9
                                                     S >5     0  I-   0          > 50     6     TOTAL 11145      TOTAL       266

ADVANCED COURSE IN       0-  29    15    19          Q1-2     3  L-  44 P-   1   1-10    79      1- 50  186       IN-DPT     50
 PROGRAMMING             1- 129   137   133          Q3-4    17  R- 131 D-   0  11-20    65     51-100   11      OUT-DPT     85
                         2-  32    40    40          Q >5     7  T-   0 S-   3  21-30    49    101-150    2
                         3-   9     7     7          S1-2     6  A-   3 C-   0  31-40     5    151-200    1
                         4-   1     1     1          S3-4   126  E-  13         41-50     1       >200    0
                                                     S >5     0  I-   5          > 50     1     TOTAL  3742      TOTAL       136

FIRST COURSE IN COMPUTER 0-   3     7     2          Q1-2     1  L-  10 P-   1   1-10    12      1- 50   31       IN-DPT     32
 DESIGN                  1-  27    23    27          Q3-4     5  R-  26 D-   0  11-20    12     51-100    2      OUT-DPT     20
                         2-   5     5     5          Q >5     3  T-   0 S-   0  21-30     4    101-150    3
                         3-   2     1     2          S1-2     4  A-   0 C-   0  31-40     5    151-200    0
                         4-   0     1     1          S3-4    16  E-   0         41-50     1       >200    1
                                                     S >5     0  I-   0          > 50     3     TOTAL  1484      TOTAL        52

ADVANCED COURSE IN COM-  0-  12     8     8          Q1-2     1  L-  21 P-   1   1-10    23      1- 50   40       IN-DPT     26
 PUTER DESIGN (COMPUTER  1-  19    25    23          Q3-4    10  R-  17 C-   0  11-20     9     51-100    1      OUT-DPT     25
 ARCHITECTURE)           2-   6     4     6          Q >5     2  T-   0 S-   0  21-30     6    101-150    0
                         3-   4     4     4          S1-2     2  A-   0 C-   0  31-40     3    151-200    0
                         4-   0     0     0          S3-4    21  E-   1         41-50     0       >200    0
                                                     S >5     0  I-   1          > 50     0     TOTAL   731      TOTAL        51

PROGRAMMING LANGUAGES    0-  27    15    17          Q1-2     2  L-  34 P-   1   1-10    47      1- 50   78       IN-DPT     86
 (STRUCTURE, ETC.)       1-  52    59    57          Q3-4     8  R-  51 D-   0  11-20    17     51-100    7      OUT-DPT     42
                         2-   8    12    12          Q >5     3  T-   0 S-   1  21-30    14    101-150    2
                         3-   4     3     3          S1-2     2  A-   2 C-   0  31-40     6    151-200    1
                         4-   0     2     2          S3-4    67  E-   1         41-50     2       >200    3
                                                     S >5     0  I-   1          > 50     5     TOTAL  2781      TOTAL       129

OPERATING SYSTEMS        0-  32    25    20          Q1-2     5  L-  45 P-   2   1-10    50      1- 50   97       IN-DPT     75
 (SYSTEMS PROGRAMMING,   1-  59    67    71          Q3-4    21  R-  56 D-   0  11-20    28     51-100    9      OUT-DPT     73
  ETC.)                  2-  16    15    16          Q >5     3  T-   0 S-   1  21-30    13    101-150    1
                         3-   1     1     0          S1-2     4  A-   3 C-   0  31-40    11    151-200    1
                         4-   0     0     1          S3-4    66  E-   1         41-50     3       >200    0
                                                     S >5     2  I-   0          > 50     3     TOTAL  2273      TOTAL       148

DATA STRUCTURES          0-  33    18    25          Q1-2     4  L-  41 P-   1   1-10    48      1- 50   91       IN-DPT    138
                         1-  58    72    63          Q3-4     9  R-  58 D-   1  11-20    26     51-100   13      OUT-DPT     27
                         2-  13    13    16          Q >5     4  T-   0 S-   1  21-30    20    101-150    1
                         3-   1     2     1          S1-2     1  A-   3 C-   0  31-40     6    151-200    0
                         4-   0     0     0          S3-4    72  E-   0         41-50     1       >200    0
                                                     S >5     0  I-   0          > 50     4     TOTAL  2231      TOTAL       165
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION                                PAGE X-14

                                                  SUMMARY BY COURSE TYPE
      GROUP (PRIVATE;                  1          CONTINUED
                           NUMBER  OF  TERMS                CR HOURS                        **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
  COURSE DESCRIPTION           OFFERED                      QTR AND                                  SECT     * 1976-77  * 1976-77 (THOUS$)
                           76-77 77-78 78-79                SEMESTER    MODE OF OPER        NO.  SIZE     * NO.  FREQ* ON AND OFF-CAMPUS

AUTOMATA THEORY            0-   6    13     2               Q1-2    1  L-  26 P-   0   1-10    20      1- 50    26       IN-DPT      1
                           1-  19    13    24               Q3-4    5  R-   2 D-   0  11-20     3     51-100     2      OUT-DPT      0
                           2-   3     2     2               Q >5    0  T-   0 S-   0  21-30     2    101-150     0
                           3-   0     0     0               S1-2    1  A-   0 C-   0  31-40     2    151-200     0
                           4-   0     0     0               S3-4   20  E-   0         41-50     1       >200     0
                                                            S >5    0  I-   0          > 50     0      TOTAL   404       TOTAL       1

SIMULATION APPLICATIONS    0-   8     4     3               Q1-2    0  L-  12 P-   1   1-10    21      1- 50    40       IN-DPT      8
 (NON-ECONOMETRIC)         1-  31    34    34               Q3-4    2  R-  22 D-   0  11-20    10     51-100     0      OUT-DPT     54
                           2-   1     2     3               Q >5    1  T-   0 S-   2  21-30     6    101-150     0
                           3-   0     0     0               S1-2    1  A-   0 C-   0  31-40     3    151-200     0
                           4-   0     0     0               S3-4   33  E-   2         41-50     0       >200     0
                                                            S >5    1  I-   1          > 50     0      TOTAL   554       TOTAL      62

SIMULATION LANGUAGES       0-   9    10     6               Q1-2    2  L-   8 P-   0   1-10    14      1- 50    24       IN-DPT      2
 AND/OR TECHNIQUES         1-  11    11    15               Q3-4    3  R-  15 D-   0  11-20     5     51-100     0      OUT-DPT      2
                           2-   4     2     3               Q >5    1  T-   0 S-   0  21-30     3    101-150     0
                           3-   0     1     0               S1-2    3  A-   1 C-   0  31-40     2    151-200     0
                           4-   0     0     0               S3-4   14  E-   0         41-50     0       >200     0
                                                            S >5    0  I-   0          > 50     0      TOTAL   323       TOTAL       4

ARTIFICIAL INTELLIGENCE    0-   8     6     2               Q1-2    5  L-  28 P-   1   1-10    21      1- 50    37       IN-DPT    111
 (HEURISTIC PROGRAMMING)   1-  31    33    37               Q3-4    4  R-   7 D-   0  11-20    11     51-100     2      OUT-DPT     11
                           2-   1     1     1               Q >5    1  T-   0 S-   3  21-30     6    101-150     0
                           3-   0     0     0               S1-2    1  A-   1 C-   0  31-40     1    151-200     1
                           4-   0     0     0               S3-4   27  E-   0         41-50     0       >200     0
                                                            S >5    0  I-   0          > 50     1      TOTAL   806       TOTAL     122

HYBRID COMPUTERS           0-   3     3     0               Q1-2    0  L-   3 P-   0   1-10     4      1- 50     6       IN-DPT      5
                           1-   3     3     6               Q3-4    2  R-   3 D-   0  11-20     2     51-100     1      OUT-DPT      2
                           2-   1     1     1               Q >5    0  T-   0 S-   0  21-30     1    101-150     0
                           3-   0     0     0               S1-2    0  A-   0 C-   0  31-40     0    151-200     0
                           4-   0     0     0               S3-4    4  E-   1         41-50     0       >200     0
                                                            S >5    0  I-   0          > 50     0      TOTAL   103       TOTAL       7

DISCRETE STRUCTURES        0-  15     6     9               Q1-2    0  L-  26 P-   0   1-10    20      1- 50    33       IN-DPT      2
                           1-  19    28    25               Q3-4    4  R-  12 D-   0  11-20     9     51-100     3      OUT-DPT     22
                           2-   4     3     3               Q >5    1  T-   0 S-   0  21-30     4    101-150     1
                           3-   0     1     1               S1-2    2  A-   0 C-   0  31-40     3    151-200     0
                           4-   0     0     0               S3-4   26  E-   0         41-50     1       >200     1
                                                            S >5    0  I-   0          > 50     1      TOTAL   688       TOTAL      24

COMPUTER ORGANIZATION      0-  13    12     5               Q1-2    3  L-  17 P-   0   1-10    25      1- 50    44       IN-DPT     24
                           1-  34    35    42               Q3-4    4  R-  32 D-   0  11-20    18     51-100     6      OUT-DPT      8
                           2-   2     3     2               Q >5    1  T-   1 S-   0  21-30     3    101-150     1
                           3-   2     1     2               S1-2    2  A-   1 C-   0  31-40     5    151-200     0
                           4-   0     0     0               S3-4   38  E-   0         41-50     0       >200     0
                                                            S >5    0  I-   0          > 50     0      TOTAL  1006       TOTAL      32

SWITCHING THEORY           0-   6     3     2               Q1-2    0  L-  12 P-   0   1-10     7      1- 50    16       IN-DPT     17
                           1-  11    14    15               Q3-4    2  R-   9 D-   0  11-20     4     51-100     5      OUT-DPT      0
                           2-   0     1     0               Q >5    0  T-   0 S-   0  21-30     7    101-150     0
                           3-   4     3     4               S1-2    0  A-   0 C-   0  31-40     0    151-200     0
                           4-   0     0     0               S3-4   17  E-   0         41-50     1       >200     0
                                                            S >5    0  I-   0          > 50     2      TOTAL   597       TOTAL      17

SEQUENTIAL MACHINES        0-   3     4     3               Q1-2    1  L-   6 P-   0   1-10     4      1- 50     9       IN-DPT     17
                           1-   5     4     5               Q3-4    1  R-   3 D-   0  11-20     4     51-100     1      OUT-DPT      0
                           2-   1     1     2               Q >5    0  T-   0 S-   0  21-30     2    101-150     0
                           3-   1     1     0               S1-2    0  A-   1 C-   0  31-40     0    151-200     0
                           4-   0     0     0               S3-4    7  E-   0         41-50     0       >200     0
                                                            S >5    0  I-   0          > 50     0      TOTAL   211       TOTAL      17

COMPILER CONSTRUCTION      0-  14    18     7               Q1-2    1  L-  30 P-   0   1-10    33      1- 50    58       IN-DPT     35
                           1-  36    35    46               Q3-4    6  R-  25 D-   0  11-20    17     51-100     1      OUT-DPT     14
                           2-  10     7     7               Q >5    2  T-   0 S-   3  21-30     9    101-150     1
                           3-   0     0     0               S1-2    3  A-   2 C-   0  31-40     1    151-200     0
                           4-   0     0     0               S3-4   41  E-   0         41-50     0       >200     0
                                                            S >5    1  I-   0          > 50     0      TOTAL   952       TOTAL      49

FORMAL LANGUAGES AND       0-  11    12     5               Q1-2    3  L-  27 P-   0   1-10    19      1- 50    33       IN-DPT      0
 SYNTACTIC ANALYSIS        1-  17    17    23               Q3-4    8  R-   5 D-   0  11-20    10     51-100     0      OUT-DPT      0
                           2-   5     4     5               Q >5    1  T-   0 S-   0  21-30     3    101-150     0
                           3-   0     0     0               S1-2    0  A-   1 C-   0  31-40     1    151-200     0
                           4-   0     0     0               S3-4   21  E-   0         41-50     0       >200     0
                                                            S >5    0  I-   0          > 50     0      TOTAL   436       TOTAL       0

INTRODUCTORY COMPUTER      0-   8     7     4               Q1-2    1  L-  14 P-   0   1-10    19      1- 50    31       IN-DPT      4
 ORGANIZATION              1-  22    23    26               Q3-4    4  R-  17 D-   0  11-20     5     51-100     5      OUT-DPT     14
                           2-   7     8     7               Q >5    2  T-   0 S-   0  21-30    11    101-150     2
                           3-   2     1     2               S1-2    1  A-   7 C-   0  31-40     4    151-200     1
                           4-   1     1     1               S3-4   28  E-   2         41-50     1       >200     1
                                                            S >5    0  I-   0          > 50     0      TOTAL  1492       TOTAL      17
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                                            SUMMARY BY COURSE TYPE
   GROUP (PRIVATE)                  )       CONTINUED
                            NUMBER OF TERMS       CR HOURS                        **  AVERAGE **  *ENROLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTION           OFFERED             QTR AND                               SECT      * 1976-77  * 1976-77 (THOUS$)
                          76-77 77-78 78-79      SEMESTER    MODE OF OPER      NO.     SIZE      * NO.  FREQ* ON AND OFF-CAMPUS

ADVANCED COMPUTER         0-   5    4    2       Q1-2    1  L- 10 P-   0    1-10      7          1- 50   15      IN-DPT    15
 ORGANIZATION             1-  11   13   15       Q3-4    4  R- [illegible] D-   0   11-20      5         51-100    3     OUT-DPT     6
                          2-   3    2    2       Q >5    0  T-  0 S-   0   21-30      4        101-150    1
                          3-   0    0    0       S1-2    2  A-  2 C-   0   31-40      1        151-200    0
                          4-   0    0    0       S3-4   12  E-  0            41-50      0           >200    0
                                                 S >5    0  I-  0             > 50      2          TOTAL  587      TOTAL     21

INFORMATION STORAGE       0-   3    3    2       Q1-2    1  L-  5 P-   0    1-10      7          1- 50   14      IN-DPT     3
 AND RETRIEVAL            1-  10    9   10       Q3-4    2  R- 10 D-   0   11-20      5         51-100    1     OUT-DPT    11
                          2-   3    3    3       Q >5    0  T-  0 S-   0   21-30      2        101-150    1
                          3-   0    1    1       S1-2    1  A-  1 C-   0   31-40      1        151-200    0
                          4-   1    1    1       S3-4   10  E-  1            41-50      0           >200    1
                                                 S >5    0  I-  0             > 50      2          TOTAL 1102      TOTAL     14

COMPUTER GRAPHICS         0-   5    3    1       Q1-2    1  L-  6 P-   0    1-10     14          1- 50   17      IN-DPT     3
                          1-   9   11   13       Q3-4    1  R- 11 D-   0   11-20      3         51-100    0     OUT-DPT     6
                          2-   3    3    3       Q >5    0  T-  0 S-   0   21-30      1        101-150    0
                          3-   1    1    1       S1-2    1  A-  0 C-   0   31-40      0        151-200    0
                          4-   0    0    0       S3-4   14  E-  0            41-50      0           >200    1
                                                 S >5    0  I-  1             > 50      0          TOTAL  783      TOTAL      9

COMPUTABILITY             0-   5    5    4       Q1-2    2  L- 24 P-   0    1-10     11          1- 50   26      IN-DPT     0
                          1-  16   16   17       Q3-4   10  R-  1 D-   0   11-20     11         51-100    1     OUT-DPT     0
                          2-   4    4    4       Q >5    1  T-  0 S-   0   21-30      3        101-150    0
                          3-   2    2    2       S1-2    2  A-  2 C-   0   31-40      1        151-200    0
                          4-   0    0    0       S3-4   12  E-  0            41-50      1           >200    0
                                                 S >5    0  I-  0             > 50      0          TOTAL  522      TOTAL      1

INTRODUCTORY NUMERICAL    0-  38   33   27       Q1-2    6  L- 61 P-   0    1-10     80          1- 50  137      IN-DPT    52
 ANALYSIS (OR METHODS)    1-  85   87   94       Q3-4    9  R- 84 D-   0   11-20     45         51-100   11     OUT-DPT    45
                          2-  21   22   20       Q >5    2  T-  0 S-   1   21-30     18        101-150    2
                          3-   8   10   11       S1-2    2  A-  1 C-   0   31-40      5        151-200    0
                          4-   1    1    1       S3-4  106  E-  3            41-50      2           >200    3
                                                 S >5    2  I-  3             > 50      3          TOTAL 4452      TOTAL     96

ADVANCED NUMERICAL        0-  11   14    7       Q1-2    2  L- 26 P-   0    1-10     29          1- 50   47      IN-DPT     7
 ANALYSIS                 1-  29   26   33       Q3-4    6  R- 23 D-   0   11-20     10         51-100    3     OUT-DPT    12
                          2-   6    6    6       Q >5    0  T-  0 S-   1   21-30     10        101-150    0
                          3-   4    4    4       S1-2    4  A-  0 C-   0   31-40      1        151-200    0
                          4-   0    0    0       S3-4   30  E-  0            41-50      0           >200    0
                                                 S >5    1  I-  0             > 50      0          TOTAL  798      TOTAL     19

INTRODUCTORY OPERATIONS   0-  10    6    8       Q1-2    1  L- 25 P-   0    1-10     17          1- 50   36      IN-DPT     1
 RESEARCH                 1-  25   29   28       Q3-4    1  R- 12 D-   0   11-20     13         51-100    4     OUT-DPT     4
                          2-   5    4    3       Q >5    1  T-  0 S-   0   21-30      9        101-150    0
                          3-   0    0    0       S1-2    2  A-  2 C-   0   31-40      3        151-200    0
                          4-   2    3    3       S3-4   34  E-  3            41-50      0           >200    2
                                                 S >5    0  I-  0             > 50      0          TOTAL 1301      TOTAL      5

ADVANCED OPERATIONS       0-   7    6    9       Q1-2    1  L- 16 P-   0    1-10      7          1- 50   27      IN-DPT     3
 RESEARCH                 1-  19   21   18       Q3-4    0  R-  8 D-   0   11-20     15         51-100    2     OUT-DPT    35
                          2-   3    2    2       Q >5    0  T-  0 S-   0   21-30      3        101-150    0
                          3-   0    0    0       S1-2    5  A-  4 C-   0   31-40      4        151-200    0
                          4-   0    0    0       S3-4   22  E-  1            41-50      0           >200    0
                                                 S >5    0  I-  0             > 50      0          TOTAL  655      TOTAL     37

DATA COMMUNICATIONS       0-   3    4    1       Q1-2    0  L-  7 P-   0    1-10      6          1- 50   12      IN-DPT     8
                          1-   8    8   11       Q3-4    4  R-  5 D-   0   11-20      3         51-100    2     OUT-DPT     2
                          2-   3    2    2       Q >5    0  T-  0 S-   1   21-30      4        101-150    0
                          3-   0    0    0       S1-2    0  A-  1 C-   0   31-40      1        151-200    0
                          4-   0    0    0       S3-4    9  E-  0            41-50      0           >200    0
                                                 S >5    0  I-  0             > 50      0          TOTAL  328      TOTAL      9

PROCESS CONTROL           0-   2    1    1       Q1-2    0  L-  1 P-   0    1-10      2          1- 50    5      IN-DPT    12
                          1-   2    3    3       Q3-4    1  R-  4 D-   0   11-20      2         51-100    0     OUT-DPT    12
                          2-   0    1    1       Q >5    0  T-  0 S-   0   21-30      1        101-150    0
                          3-   1    0    0       S1-2    0  A-  0 C-   0   31-40      0        151-200    0
                          4-   0    0    0       S3-4    4  E-  0            41-50      0           >200    0
                                                 S >5    0  I-  0             > 50      0          TOTAL   93      TOTAL     24

DATA PREPARATION (KEY     0-   2    4    2       Q1-2    1  L-  1 P-   2    1-10      6          1- 50   12      IN-DPT    37
 PUNCH, VERIFIER, DATA    1-   2    1    4       Q3-4    3  R-  9 D-   0   11-20      5         51-100    0     OUT-DPT    30
 ENTRY,...)               2-   6    3    2       Q >5    0  T-  0 S-   0   21-30      0        101-150    0
                          3-   0    3    3       S1-2    3  A-  0 C-   0   31-40      1        151-200    0
                          4-   2    1    1       S3-4    4  E-  0            41-50      0           >200    0
                                                 S >5    0  I-  0             > 50      0          TOTAL  279      TOTAL     67

UNIT RECORD (EAM)         0-   0    0    0       Q1-2    0  L-  0 P-   1    1-10      1          1- 50    3      IN-DPT    12
                          1-   2    2    2       Q3-4    2  R-  2 D-   0   11-20      1         51-100    0     OUT-DPT    12
                          2-   0    1    1       Q >5    0  T-  0 S-   0   21-30      1        101-150    0
                          3-   1    0    0       S1-2    0  A-  0 C-   0   31-40      0        151-200    0
                          4-   0    0    0       S3-4    1  E-  0            41-50      0           >200    0
                                                 S >5    0  I-  0             > 50      0          TOTAL   90      TOTAL     24
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                                           SUMMARY BY COURSE TYPE
   GROUP (PRIVATE;               )          CONTINUED
                           NUMBER  OF  TERMS         CR HCURS                           ** AVERAGE ** *ENROLLMENT* CCST COMPUTER SVCS
 COURSE DESCRIPTION            OFFERED               QTR AND                                 SECT     * 1976-77  * 1976-77 (THOUS$)
                           76-77 77-78 78-79         SEMESTER   MODE OF OPER        NO.     SIZE     * NO.  FREQ* ON AND OFF-CAMPUS

INTRODUCTORY COURSE       0-   7     3     5         Q1-2    1  L-  29 P-  0     1-10     13        1- 50    52      IN-DPT    25
 IN DATA PROCESSING       1-  34    38    35         Q3-4   10  R-  45 D-  0    11-20     23       51-100    23      OUT-DPT   52
                          2-  26    26    24         Q >5    1  T-   0 S-  0    21-30     30      101-150     3
                          3-  18    14    17         S1-2    2  A-   8 C-  0    31-40     20      151-200     2
                          4-   4     8     8         S3-4   60  E-   9            41-50      4         >200    11
                                                     S >5    0  I-   0             > 50      1        TOTAL  8619      TOTAL     77

ADVANCED COURSE IN DATA   0-   4     4     3         Q1-2    0  L-   6 P-  2     1-10     10        1- 50    13      IN-DPT    22
 PROCESSING               1-   8     7     8         Q3-4    5  R-   6 D-  0    11-20      2       51-100     2      CUT-DPT    1
                          2-   3     4     4         Q >5    0  T-   0 S-  0    21-30      3      101-150     0
                          3-   2     2     2         S1-2    1  A-   0 C-  0    31-40      1      151-200     0
                          4-   0     0     0         S3-4    8  E-   3            41-50      0         >20C     2
                                                     S >5    0  I-   0             > 50      1        TOTAL  1247      TOTAL     22

PRCBLEM SCLVING COURSE    0-  14    12    11         Q1-2    0  L-  15 P-  0     1-10     19        1- 50    43      IN-DPT    24
 IN BUSINESS APPLI-       1-  29    32    33         Q3-4    4  R-  32 D-  0    11-20     17       51-100     6      OUT-DPT  171
 CATICNS                  2-  12    11    10         Q >5    1  T-   0 S-  3    21-30      8      101-150     5
                          3-  14    15    16         S1-2    1  A-  19 C-  0    31-40     23      151-200     4
                          4-   3     2     2         S3-4   61  E-   3            41-50      5         >200    14
                                                     S >5    0  I-   0             > 50      0        TOTAL  9310      TOTAL    195

ADVANCED BUSINESS APPLI-  0-   9     8     6         Q1-2    0  L-  11 P-  2     1-10     10        1- 50    25      IN-DPT     2
 CATICNS (MARKETING,      1-  16    17    19         Q3-4    4  R-   6 D-  0    11-20      6       51-100     3      OUT-DPT    0
 FINANCE, PRODUCTION,     2-   3     3     3         Q >5    4  T-   0 S-  3    21-30      4      101-150     2
 ETC.)                    3-   1     1     1         S1-2    2  A-   8 C-  0    31-40      8      151-200     0
                          4-   1     1     1         S3-4   20  E-   0            41-50      2         >200     0
                                                     S >5    0  I-   0             > 50      0        TOTAL   882      TOTAL      2

INTRODUCTORY SYSTEMS      0-  12     2     8         Q1-2    0  L-  14 P-  0     1-10     15        1- 50    35      IN-DPT     1
 ANALYSIS (BUSINESS)      1-  21    27    22         Q3-4    6  R-  17 D-  0    11-20     12       51-100     2      OUT-DPT    2
                          2-   3     6     5         Q >5    0  T-   0 S-  1    21-30     11      101-150     1
                          3-   3     4     4         S1-2    1  A-   5 C-  0    31-40      1      151-200     0
                          4-   0     0     0         S3-4   30  E-   1            41-50      0         >200     1
                                                     S >5    1  I-   1             > 50      0        TOTAL  1130      TOTAL      3

LARGE SCALE INFORMATION   0-   2     1     0         Q1-2    1  L-   4 P-  0     1-10      2        1- 50     5      IN-DPT     1
 PROCESSING SYSTEMS       1-   3     4     5         Q3-4    0  R-   0 D-  0    11-20      2       51-100     1      OUT-DPT    7
                          2-   1     1     1         Q >5    0  T-   0 S-  1    21-30      2      101-150     0
                          3-   0     0     0         S1-2    0  A-   0 C-  0    31-40      0      151-200     0
                          4-   0     0     0         S3-4    5  E-   0            41-50      0         >200     0
                                                     S >5    0  I-   1             > 50      0        TOTAL   153      TOTAL      7

FILE ORGANIZATION         0-   3     1     1         Q1-2    0  L-   2 P-  0     1-10      4        1- 50    11      IN-DPT     6
                          1-   6     7     7         Q3-4    1  R-   8 D-  0    11-20      7       51-100     1      OUT-DPT   11
                          2-   3     3     3         Q >5    0  T-   0 S-  0    21-30      1      101-150     0
                          3-   0     1     1         S1-2    1  A-   1 C-  0    31-40      0      151-200     0
                          4-   0     0     0         S3-4    8  E-   1            41-50      0         >200     0
                                                     S >5    0  I-   0             > 50      0        TOTAL   279      TOTAL     16

DATA BASE MANAGEMENT      0-   5     5     1         Q1-2    1  L-  17 P-  0     1-10      8        1- 50    25      IN-DPT    15
                          1-  19    18    22         Q3-4    4  R-   7 D-  0    11-20     12       51-100     5      OUT-DPT    2
                          2-   6     7     7         Q >5    1  T-   2 S-  0    21-30      7      101-150     0
                          3-   0     0     0         S1-2    1  A-   2 C-  0    31-40      2      151-200     0
                          4-   0     0     0         S3-4   21  E-   2            41-50      1         >200     0
                                                     S >5    1  I-   0             > 50      0        TOTAL   812      TOTAL     17

INFORMATICN SYSTEMS       0-  11     7     6         Q1-2    2  L-  17 P-  1     1-10     15        1- 50    36      IN-CPT     5
 DESIGN (INTRODUCTORY)    1-  24    27    28         Q3-4    6  R-  17 C-  0    11-20     17       51-100     4      OUT-DPT   23
                          2-   6     7     7         Q >5    0  T-   0 S-  0    21-30      5      101-150     1
                          3-   0     0     0         S1-2    2  A-   2 C-  0    31-40      2      151-200     0
                          4-   0     0     0         S3-4   27  E-   4            41-50      0         >200     0
                                                     S >5    0  I-   0             > 50      2        TOTAL  1024      TOTAL     28

INFORMATION SYSTEMS       0-   7     7     6         Q1-2    2  L-  14 P-  0     1-10     15        1- 50    24      IN-DPT     1
 CESIGN (ADVANCED)        1-  14    12    13         Q3-4    4  R-   8 D-  0    11-20      6       51-100     1      OUT-DPT    6
                          2-   4     6     5         Q >5    0  T-   0 S-  1    21-30      2      101-150     0
                          3-   0     0     1         S1-2    1  A-   1 C-  1    31-40      2      151-200     0
                          4-   0     0     0         S3-4   16  E-   0            41-50      0         >200     0
                                                     S >5    0  I-   0             > 50      0        TOTAL   346      TOTAL      7

MANAGEMENT INFORMATION    0-   8     5     4         Q1-2    1  L-  17 P-  0     1-10      8        1- 50    28      IN-DPT     3
 SYSTEMS                  1-  18    20    21         Q3-4    1  R-  12 D-  0    11-20     10       51-100     5      OUT-DPT    8
                          2-   9    10    10         Q >5    0  T-   1 S-  1    21-30      8      101-150     1
                          3-   0     0     0         S1-2    2  A-   3 C-  0    31-40      6      151-200     1
                          4-   1     1     1         S3-4   29  E-   2            41-50      3         >200     1
                                                     S >5    2  I-   0             > 50      1        TCTAL  1443      TOTAL     11

MANAGEMENT OF COMPUTER    0-   1     3     0         Q1-2    0  L-   5 P-  0     1-10      3        1- 50     7      IN-DPT     0
  CENTERS CF INFORMATION  1-   6     4     7         Q3-4    2  R-   0 D-  0    11-20      4       51-100     1      CUT-DPT    0
   PROCESSING DEPARTMENTS 2-   1     1     1         Q >5    0  T-   2 S-  1    21-30      0      101-150     0
                          3-   0     0     0         S1-2    0  A-   0 C-  0    31-40      1      151-200     0
                          4-   0     0     0         S3-4    5  E-   0            41-50      0         >200     0
                                                     S >5    0  I-   0             > 50      0        TOTAL   192      TOTAL      0
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                                                    SUMMARY BY COURSE TYPE
    GROUP (PRIVATE;                        )         CONTINUED
                             NUMBER  OF  TERMS         CR HCURS                                ** AVERAGE ** *ENRCLLMENT* CCST COMPUTER SVCS
COURSE DESCRIPTION               OFFERED               QTR AND                                       SECT     * 1976-77  * 1976-77 (THOUS$)
                           76-77 77-78 78-79           SEMESTER    MODE OF OPER         NO.     SIZE      * NO.   FREQ* ON AND OFF-CAMPUS

COMPUTERS AND ACCOUNTING  0-   0     2     1           Q1-2     0  L-   3 P-   0     1-10       0          1- 50      5       IN-DPT     1
 (INCLUDING AUDITING)     1-   2     1     2           Q3-4     1  R-   1 D-   0    11-20       3         51-100      0      OUT-DPT     0
                          2-   3     2     2           Q >5     0  T-   0 S-   0    21-30       1        101-150      0
                          3-   1     1     1           S1-2     0  A-   2 C-   0    31-40       2        151-200      0
                          4-   0     0     0           S3-4     3  E-   0             41-50       0           >200      1
                                                       S >5     0  I-   0              > 50       0          TOTAL    379       TOTAL       1

ECONOMETRIC SIMULATION    0-   0     0     0           Q1-2     0  L-   4 P-   0     1-10       7          1- 50     11       IN-CPT     3
 APPLICATIONS             1-   7     7     7           Q3-4     2  R-   9 D-   0    11-20       1         51-100      1      OUT-DPT     1
                          2-   7     7     7           Q >5     0  T-   0 S-   1    21-30       6        101-150      1
                          3-   0     0     0           S1-2     0  A-   0 C-   0    31-40       0        151-200      1
                          4-   0     0     0           S3-4    11  E-   0             41-50       0           >200      0
                                                       S >5     0  I-   0              > 50       0          TCTAL    506       TOTAL       4

INSTRUCTIONAL DESIGN      0-   0     1     0           Q1-2     0  L-   1 P-   1     1-10       2          1- 50      2       IN-DPT     0
                          1-   1     0     1           Q3-4     0  R-   0 D-   0    11-20       0         51-100      0      CUT-DPT     0
                          2-   1     1     1           Q >5     0  T-   0 S-   0    21-30       0        101-15C      0
                          3-   0     0     0           S1-2     0  A-   0 C-   0    31-40       0        151-200      0
                          4-   0     0     0           S3-4     2  E-   0             41-50       0           >200      0
                                                       S >5     0  I-   0              > 50       0          TOTAL      4       TOTAL       0

INSTRUCTIONAL SYSTEMS     0-   1     1     1           Q1-2     0  L-   1 P-   0     1-10       2          1- 50      2       IN-DPT     0
                          1-   1     0     1           Q3-4     0  R-   1 D-   0    11-20       0         51-100      0      OUT-DPT     0
                          2-   0     1     0           Q >5     0  T-   0 S-   0    21-30       0        101-150      0
                          3-   0     0     0           S1-2     0  A-   0 C-   0    31-40       0        151-200      0
                          4-   0     0     0           S3-4     2  E-   0             41-50       0           >200      0
                                                       S >5     0  I-   0              > 50       0          TOTAL      4       TOTAL       0

COMPUTER BASEC            0-   1     5     5           Q1-2     0  L-   3 P-   1     1-10       5          1- 50     10       IN-DPT     0
INSTRUCTION               1-   7     5     5           Q3-4     0  R-   4 D-   0    11-20       4         51-100      2      OUT-DPT     0
                          2-   3     1     1           Q >5     0  T-   0 S-   1    21-30       2        101-150      0
                          3-   1     1     1           S1-2     3  A-   0 C-   1    31-40       1        151-200      0
                          4-   0     0     0           S3-4     8  E-   2             41-50       0           >200      0
                                                       S >5     0  I-   0              > 50       0          TOTAL    279       TOTAL       0

OTHER                     0-  47    42    29           Q1-2    15  L- 121 P-   5     1-10     167          1- 50    292       IN-DPT    31
                          1- 173   180   189           Q3-4    18  R-  91 D-   3    11-20      82         51-100     10      OUT-DPT    38
                          2-  68    68    70           Q >5     5  T-   0 S-  19    21-30      39        101-150      5
                          3-  19    17    19           S1-2    37  A-   4 C-   0    31-40      15        151-200      0
                          4-   2     2     2           S3-4   187  E-   2             41-50       3           >200      2
                                                       S >5     8  I-  64              > 50       3          TOTAL   6141       TOTAL      69

DESCRIPTION NOT CODED     0-  61    60    69           Q1-2     1  L- 114 P-   0     1-10     102          1- 50    115       IN-DPT     0
                          1-  54    46    48           Q3-4     9  R-   8 D-   2    11-20       3         51-100      9      CUT-DPT     0
                          2-   6     7     6           Q >5     0  T-   0 S-   2    21-30      18        101-150      1
                          3-   5    12     3           S1-2    33  A-   0 C-   1    31-40       1        151-200      2
                          4-   1     2     1           S3-4    78  E-   0             41-50       1           >200      0
                                                       S >5     3  I-   0              > 50       2          TOTAL   1859       TOTAL       0
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                                                   SUMMARY BY COURSE TYPE
  GROUP (         ASSOCIATE:           )
                     NUMBER   OF  TERMS          CR HOURS                         **   AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTION       OFFERED                QTR AND                                 SECT     * 1976-77  * 1976-77 (THOUS$)
                     76-77 77-78 78-79           SEMESTER    MCOE OF OPER         NO.   SIZE     * NO.  FREQ* ON AND OFF-CAMPUS

COMPUTER APPRECIATION     0-   6     3     7     Q1-2     3  L-  39 P-   6   1-10   12      1- 50   57        IN-DPT     16
                          1-  28    35    32     Q3-4    26  R-  42 D-   0  11-20   34     51-100   27       OUT-DPT     36
                          2-  49    46    44     Q >5     1  T-   1 S-   1  21-30   53    101-150   13
                          3-  21    19    20     S1-2    13  A-   9 C-   0  31-40    9    151-200    4
                          4-   8     8     9     S3-4    51  E-  14          41-50    2       >200   12
                                                 S >5     2  I-   1           > 50    3      TOTAL 9303       TOTAL       52

PROBLEM SOLVING COURSE    0-   0     0     0     Q1-2     1  L-   0 P-   0   1-10    1      1- 50    4        IN-CPT      0
 IN THE HUMANITIES        1-   3     3     3     Q3-4     2  R-   3 D-   0  11-20    0     51-100    1       OUT-DPT      0
                          2-   1     1     0     Q >5     0  T-   0 S-   0  21-30    4    101-150    0
                          3-   1     1     2     S1-2     0  A-   0 C-   0  31-40    0    151-200    0
                          4-   0     0     0     S3-4     2  E-   1          41-50    0       >200    0
                                                 S >5     0  I-   1           > 50    0      TOTAL  151       TOTAL        0

INTRODUCTORY COURSE IN    0-  25    17    18     Q1-2    26  L-  47 P-   1   1-10   70      1- 50  317        IN-DPT    509
 SOME COMPILER LANGUAGE   1- 200   200   199     Q3-4   133  R- 372 D-   0  11-20  205     51-100  100       OUT-DPT    840
 SUCH AS FORTRAN, PL/1,   2- 152   149   148     Q >5    38  T-   0 S-   0  21-30  165    101-150   29
 BASIC, ALGCL             3-  83    80    84     S1-2    46  A-   5 C-   0  31-40   37    151-200   15
                          4-  25    37    33     S3-4   212  E-  52          41-50    9       >200   26
                                                 S >5     2  I-  10           > 50    1      TOTAL 32391      TOTAL     1349

INTRODUCTORY COURSE IN A  0-  22    11    12     Q1-2     3  L-  26 P-   1   1-10   51      1- 50  200        IN-DPT     89
 LANGUAGE SUCH AS COBOL   1- 142   141   141     Q3-4    79  R- 240 D-   0  11-20  134     51-100   60       OUT-DPT     99
                          2-  95   110   107     Q >5    25  T-   0 S-   1  21-30  105    101-150   26
                          3-  31    29    31     S1-2    16  A-   1 C-   0  31-40   17    151-200    7
                          4-  19    18    18     S3-4   171  E-  35          41-50    2       >20C   16
                                                 S >5     2  I-   5           > 50    0      TOTAL 21686      TOTAL      188

PROBLEM SOLVING COURSE    0-   6     4     5     Q1-2     3  L-  14 P-   2   1-10   26      1- 50   55        IN-DPT      8
 IN ENGINEERING OR        1-  30    31    31     Q3-4    13  R-  42 D-   0  11-20   28     51-100    7       OUT-DPT      3
 SCIENTIFIC APPLI-        2-  25    24    22     Q >5     1  T-   0 S-   0  21-30   15    101-150    5
 CATIONS                  3-   6     7     8     S1-2     5  A-   2 C-   0  31-40    1    151-200    1
                          4-   3     4     4     S3-4    38  E-   5          41-50    0       >200    2
                                                 S >5     0  I-   5           > 50    0      TOTAL  2744      TOTAL       11

INTRODUCTORY COURSE IN    0-   2     4     9     Q1-2     2  L-  20 P-   0   1-10   27      1- 50  108        IN-CPT     70
 PROGRAMMING              1-  72    75    65     Q3-4    51  R- 131 D-   0  11-20   61     51-100   39       OUT-DPT    132
                          2-  65    58    62     Q >5    19  T-   0 S-   0  21-30   69    101-150   13
                          3-  28    29    28     S1-2     5  A-   4 C-   0  31-40   23    151-200    9
                          4-  16    17    19     S3-4    96  E-  24          41-50    3       >200   14
                                                 S >5     5  I-   4           > 50    0      TOTAL 13581      TOTAL      202

ADVANCED COURSE IN        0-  36    19    17     Q1-2     9  L-  22 P-  12   1-10  116      1- 50  315        IN-DPT    127
 PROGRAMMING              1- 197   205   205     Q3-4    92  R- 268 D-   0  11-20  178     51-100   39       OUT-DPT     97
                          2- 108   106   105     Q >5    43  T-   0 S-   0  21-30   75    101-150   17
                          3-  27    35    34     S1-2    12  A-   3 C-   0  31-40    8    151-200    4
                          4-  10    13    17     S3-4   206  E-  47          41-50    1       >200    3
                                                 S >5     6  I-  26           > 50    0      TOTAL 12377      TOTAL      223

FIRST COURSE IN COMPUTER  0-   1     0     0     Q1-2     0  L-   6 P-   0   1-10    7      1- 50   15        IN-CPT     16
 DESIGN                   1-   9    10    10     Q3-4     7  R-  13 D-   0  11-20    8     51-100    2       OUT-DPT     13
                          2-   7     8     8     Q >5     1  T-   0 S-   0  21-30    3    101-150    1
                          3-   2     1     1     S1-2     2  A-   0 C-   0  31-40    1    151-200    1
                          4-   1     1     1     S3-4    10  E-   1          41-50    1       >200    1
                                                 S >5     0  I-   0           > 50    0      TOTAL  1045      TOTAL       29

ADVANCED COURSE IN COM-   0-   4     0     0     Q1-2     0  L-   2 P-   0   1-10    4      1- 50    8        IN-DPT     92
 PUTER DESIGN (COMPUTER   1-   2     4     4     Q3-4     3  R-   7 D-   0  11-20    3     51-100    0       OUT-DPT     12
 ARCHITECTURE)            2-   4     6     5     Q >5     0  T-   0 S-   0  21-30    2    101-150    1
                          3-   0     0     1     S1-2     0  A-   0 C-   0  31-40    0    151-200    0
                          4-   0     0     0     S3-4     7  E-   0          41-50    0       >200    1
                                                 S >5     0  I-   1           > 50    1      TOTAL   426      TOTAL      104

PROGRAMMING LANGUAGES     0-   6     7     2     Q1-2     0  L-  12 P-   5   1-10    9      1- 50   62        IN-DPT     84
 (STRUCTURE, ETC.)        1-  50    45    47     Q3-4    14  R-  46 D-   0  11-20   54     51-100   15       CUT-DPT     28
                          2-  15    18    21     Q >5    13  T-   0 S-   0  21-30   21    101-150    4
                          3-  11    12    12     S1-2     4  A-   1 C-   0  31-40    0    151-200    3
                          4-   3     3     3     S3-4    40  E-  20          41-50    1       >200    1
                                                 S >5     7  I-   1           > 50    0      TOTAL  3656      TOTAL      112

OPERATING SYSTEMS         0-  10     8     8     Q1-2     2  L-  22 P-   0   1-10   25      1- 50   86        IN-DPT     52
 (SYSTEMS PROGRAMMING,    1-  63    67    66     Q3-4    22  R-  71 D-   0  11-20   46     51-100   15       OUT-DPT     37
 ETC.)                    2-  30    26    28     Q >5     9  T-   0 S-   0  21-30   31    101-150    6
                          3-   7     9     5     S1-2     7  A-   4 C-   0  31-40    9    151-200    0
                          4-   1     1     4     S3-4    64  E-  13          41-50    0       >200    4
                                                 S >5     1  I-   1           > 50    0      TOTAL  5194      TOTAL       89

DATA STRUCTURES           0-   1     1     1     Q1-2     2  L-   3 P-   0   1-10    4      1- 50   13        IN-DPT     11
                          1-  10    11    12     Q3-4     4  R-   9 D-   0  11-20    8     51-100    1       OUT-DPT      0
                          2-   3     3     1     Q >5     2  T-   0 S-   0  21-30    3    101-150    1
                          3-   1     0     1     S1-2     0  A-   1 C-   0  31-40    0    151-200    0
                          4-   0     0     0     S3-4     6  E-   2          41-50    0       >200    0
                                                 S >5     0  I-   0           > 50    0      TOTAL   457      TOTAL       11
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                                            SUMMARY BY COURSE TYPE
 GROUP (        ASSOCIATE:            )     CONTINUED
                    NUMBER  OF  TERMS             CR HOURS                         **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
COURSE DESCRIPTION       OFFERED                  QTR AND                                 SECT    * 1976-77  * 1976-77 (THCUS$)
                    76-77 77-78 78-79             SEMESTER   MCDE OF CPER          NO.    SIZE    * NO.  FREQ* ON AND OFF-CAMPUS

AUTOMATA THEORY          0-  0     0     0        Q1-2    0  L-   0 P-   0   1-10     0        1- 50   0      IN-DPT      0
                         1-  0     0     0        Q3-4    0  R-   1 D-   0  11-20     0       51-100   0     OUT-DPT      0
                         2-  0     0     0        Q >5    0  T-   0 S-   0  21-30     1      101-150   1
                         3-  1     1     1        S1-2    1  A-   0 C-   0  31-40     0      151-200   0
                         4-  0     0     0        S3-4    0  E-   0         41-50     0         >200   0
                                                  S >5    0  I-   0          > 50     0        TOTAL  132    TOTAL        0

SIMULATION APPLICATIONS  0-  0     0     0        Q1-2    0  L-   1 P-   0   1-10     1        1- 50   4      IN-DPT      2
 (NON-ECONOMETRIC)       1-  4     4     4        Q3-4    1  R-   1 D-   0  11-20     2       51-100   0     OUT-DPT      1
                         2-  0     0     0        Q >5    1  T-   0 S-   0  21-30     1      101-150   0
                         3-  0     0     0        S1-2    0  A-   0 C-   0  31-40     0      151-200   0
                         4-  0     0     0        S3-4    2  E-   0         41-50     0         >200   0
                                                  S >5    0  I-   2          > 50     0        TOTAL   59    TOTAL        3

SIMULATION LANGUAGES     0-  1     0     0        Q1-2    0  L-   2 P-   0   1-10     2        1- 50   3      IN-DPT      0
 AND/OR TECHNIQUES       1-  2     3     3        Q3-4    1  R-   0 D-   0  11-20     0       51-100   0     OUT-DPT      0
                         2-  0     0     0        Q >5    0  T-   0 S-   0  21-30     0      101-150   0
                         3-  0     0     0        S1-2    0  A-   1 C-   0  31-40     1      151-200   0
                         4-  0     0     0        S3-4    0  E-   0         41-50     0         >200   0
                                                  S >5    0  I-   0          > 50     0        TOTAL    0    TOTAL        0

HYBRIC COMPUTERS         0-  0     0     0        Q1-2    0  L-   0 P-   0   1-10     0        1- 50   1      IN-DPT      0
                         1-  1     1     1        Q3-4    0  R-   1 D-   0  11-20     1       51-100   0     CUT-DPT      0
                         2-  0     0     0        Q >5    0  T-   0 S-   0  21-30     0      101-150   0
                         3-  0     0     0        S1-2    0  A-   0 C-   0  31-40     0      151-200   0
                         4-  0     0     0        S3-4    1  E-   0         41-50     0         >200   0
                                                  S >5    0  I-   0          > 50     0        TOTAL   14    TOTAL        0

DISCRETE STRUCTURES      0-  2     1     2        Q1-2    0  L-   5 P-   0   1-10     4        1- 50   4      IN-DPT      0
                         1-  2     3     2        Q3-4    0  R-   0 D-   0  11-20     0       51-100   0     OUT-DPT      0
                         2-  1     1     1        Q >5    0  T-   0 S-   0  21-30     1      101-150   1
                         3-  0     0     0        S1-2    0  A-   0 C-   0  31-40     0      151-200   0
                         4-  0     0     0        S3-4    1  E-   0         41-50     0         >200   0
                                                  S >5    0  I-   0          > 50     0        TOTAL  120    TOTAL        0

COMPUTER ORGANIZATION    0-  1     1     1        Q1-2    1  L-   0 P-   0   1-10     2        1- 50   9      IN-DPT      0
                         1-  5     5     6        Q3-4    3  R-   7 D-   0  11-20     6       51-100   2     CUT-DPT      1
                         2-  3     2     2        Q >5    0  T-   0 S-   1  21-30     4      101-150   1
                         3-  0     0     0        S1-2    2  A-   1 C-   0  31-40     0      151-200   0
                         4-  3     3     3        S3-4    5  E-   3         41-50     0         >200   0
                                                  S >5    0  I-   0          > 50     0        TOTAL  445    TOTAL        1

SWITCHING THEORY         0-  0     0     0        Q1-2    0  L-   2 P-   1   1-10     0        1- 50   2      IN-DPT      0
                         1-  2     1     1        Q3-4    0  R-   1 D-   0  11-20     2       51-100   2     OUT-DPT      0
                         2-  2     3     3        Q >5    0  T-   0 S-   0  21-30     2      101-150   0
                         3-  0     0     0        S1-2    2  A-   0 C-   0  31-40     0      151-200   0
                         4-  0     0     0        S3-4    2  E-   0         41-50     0         >200   0
                                                  S >5    0  I-   0          > 50     0        TOTAL  182    TOTAL        0

COMPILER CCNSTRUCTION    0-  1     3     4        Q1-2    0  L-   0 P-   1   1-10     3        1- 50   5      IN-CPT      0
                         1-  4     2     1        Q3-4    0  R-   4 D-   0  11-20     1       51-100   0     OUT-DPT      0
                         2-  1     1     1        Q >5    0  T-   0 S-   0  21-30     1      101-150   1
                         3-  0     0     0        S1-2    0  A-   0 C-   0  31-40     1      151-200   0
                         4-  0     0     0        S3-4    6  E-   1         41-50     0         >200   0
                                                  S >5    0  I-   0          > 50     0        TOTAL  189    TOTAL        0

FORMAL LANGUAGES AND     0-  0     0     0        Q1-2    0  L-   0 P-   0   1-10     0        1- 50   1      IN-DPT      0
 SYNTACTIC ANALYSIS      1-  0     0     0        Q3-4    1  R-   0 D-   0  11-20     1       51-100   0     OUT-DPT      0
                         2-  1     1     1        Q >5    0  T-   0 S-   0  21-30     0      101-150   0
                         3-  0     0     0        S1-2    0  A-   1 C-   0  31-40     0      151-200   0
                         4-  0     0     0        S3-4    0  E-   0         41-50     0         >200   0
                                                  S >5    0  I-   0          > 50     0        TOTAL   42    TOTAL        0

INTRODUCTORY COMPUTER    0-  4     2     6        Q1-2    0  L-  18 P-   0   1-10     7        1- 50  22      IN-DPT      2
 ORGANIZATION            1- 15    16    13        Q3-4   10  R-   6 D-   0  11-20    13       51-100   4     CUT-DPT      0
                         2- 10    11    10        Q >5    1  T-   0 S-   0  21-30     6      101-150   2
                         3-  0     0     0        S1-2    0  A-   0 C-   0  31-40     3      151-200   0
                         4-  1     1     1        S3-4    9  E-   6         41-50     1         >200   2
                                                  S >5    0  I-   0          > 50     0        TOTAL 1819    TOTAL        2

ADVANCED CCMPUTER        0-  0     0     1        Q1-2    0  L-   1 P-   0   1-10     0        1- 50   6      IN-CPT      0
 ORGANIZATION            1-  6     6     5        Q3-4    0  R-   6 D-   0  11-20     4       51-100   0     OUT-DPT      0
                         2-  1     1     1        Q >5    1  T-   0 S-   0  21-30     0      101-150   1
                         3-  0     0     0        S1-2    1  A-   0 C-   0  31-40     3      151-200   0
                         4-  0     0     0        S3-4    5  E-   0         41-50     0         >200   0
                                                  S >5    0  I-   0          > 50     0        TCTAL  255    TOTAL        0

INFORMATION STORAGE      0-  0     0     0        Q1-2    0  L-   2 P-   0   1-10     0        1- 50   6      IN-DPT     15
 AND RETRIEVAL           1-  3     5     3        Q3-4    1  R-   5 D-   0  11-20     4       51-100   0     OUT-DPT      0
                         2-  4     2     4        Q >5    3  T-   0 S-   0  21-30     1      101-15C   0
                         3-  0     0     0        S1-2    0  A-   0 C-   0  31-40     2      151-200   0
                         4-  0     0     0        S3-4    3  E-   0         41-50     0         >200   1
                                                  S >5    0  I-   0          > 50     0        TOTAL  540    TOTAL       15
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                                                 SUMMARY BY COURSE TYPE
     GROUP (         ASSOCIATE:           )      CONTINUED
                         NUMBER  OF  TERMS          CR HOURS                               **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
  COURSE DESCRIPTION         OFFERED                QTR AND                                     SECT      * 1976-77  * 1976-77 (THOUS$)
                          76-77 77-78 78-79         SEMESTER   MODE OF OPER           NO.    SIZE      * NO.  FREQ* ON AND OFF-CAMPUS

 COMPUTER GRAPHICS         0-   2     0     0       Q1-2    0  L-   1 P-   1   1-10     2        1- 50     7       IN-DPT      3
                           1-   3     5     5       Q3-4    0  R-   3 D-   0  11-20     5       51-100     0      OUT-DPT      0
                           2-   2     2     2       Q >5    0  T-   0 S-   0  21-30     0      101-150     0
                           3-   0     0     0       S1-2    5  A-   0 C-   0  31-40     0      151-200     0
                           4-   0     0     0       S3-4    2  E-   1          41-50     0         >200     0
                                                    S >5    0  I-   1           > 50     0        TOTAL   130       TOTAL        3

 COMPUTABILITY             0-   0     0     0       Q1-2    0  L-   0 P-   0   1-10     0        1- 50     2       IN-DPT      0
                           1-   1     1     1       Q3-4    0  R-   0 D-   0  11-20     2       51-100     0      OUT-DPT      0
                           2-   0     0     0       Q >5    0  T-   0 S-   0  21-30     0      101-150     0
                           3-   1     1     1       S1-2    0  A-   2 C-   0  31-40     0      151-200     0
                           4-   0     0     0       S3-4    2  E-   0          41-50     0         >200     0
                                                    S >5    0  I-   0           > 50     0        TOTAL    63       TOTAL        0

 INTRODUCTORY NUMERICAL    0-   1     3     2       Q1-2    0  L-  18 P-   0   1-10    11        1- 50    31       IN-DPT      2
  ANALYSIS (CR METHODS)    1-  30    27    28       Q3-4    6  R-  16 D-   0  11-20    18       51-100     2      OUT-DPT      2
                           2-   2     3     3       Q >5    0  T-   0 S-   0  21-30     5      101-150     1
                           3-   1     1     1       S1-2    0  A-   0 C-   0  31-40     0      151-200     0
                           4-   0     0     0       S3-4   17  E-   0          41-50     0         >200     0
                                                    S >5    1  I-   0           > 50     0        TOTAL   750       TOTAL        4

 ADVANCED NUMERICAL        0-   1     1     0       Q1-2    0  L-   0 P-   0   1-10     1        1- 50     3       IN-DPT      0
  ANALYSIS                 1-   1     1     2       Q3-4    0  R-   3 D-   0  11-20     1       51-100     0      OUT-DPT      0
                           2-   0     0     0       Q >5    0  T-   0 S-   0  21-30     1      101-150     0
                           3-   1     1     1       S1-2    1  A-   0 C-   0  31-40     0      151-200     0
                           4-   0     0     0       S3-4    2  E-   0          41-50     0         >200     0
                                                    S >5    0  I-   0           > 50     0        TOTAL    14       TOTAL        0

 INTRODUCTORY OPERATIONS   0-   1     0     0       Q1-2    2  L-   2 P-   0   1-10     3        1- 50     8       IN-DPT      0
  RESEARCH                 1-   4     5     5       Q3-4    3  R-   4 D-   0  11-20     5       51-100     2      OUT-DPT      0
                           2-   5     5     5       Q >5    1  T-   0 S-   0  21-30     2      101-150     0
                           3-   0     0     0       S1-2    0  A-   0 C-   0  31-40     0      151-200     0
                           4-   0     0     0       S3-4    4  E-   3          41-50     0         >200     0
                                                    S >5    0  I-   1           > 50     0        TOTAL   356       TOTAL        0

 ADVANCED OPERATIONS       0-   1     0     0       Q1-2    1  L-   1 P-   1   1-10     1        1- 50     2       IN-DPT      0
  RESEARCH                 1-   1     2     2       Q3-4    0  R-   1 D-   0  11-20     1       51-100     0      OUT-DPT      0
                           2-   0     0     0       Q >5    0  T-   0 S-   0  21-30     0      101-150     0
                           3-   1     1     1       S1-2    0  A-   0 C-   0  31-40     1      151-200     0
                           4-   0     0     0       S3-4    2  E-   0          41-50     0         >200     1
                                                    S >5    0  I-   0           > 50     0        TOTAL  1500       TOTAL        0

 DATA COMMUNICATIONS       0-   4     4     2       Q1-2    1  L-  12 P-   0   1-10     6        1- 50    27       IN-DPT     10
                           1-  16    16    19       Q3-4   17  R-  11 D-   0  11-20    14       51-100     3      OUT-DPT      1
                           2-  11    11    10       Q >5    1  T-   0 S-   0  21-30     9      101-150     2
                           3-   0     0     0       S1-2    1  A-   3 C-   0  31-40     3      151-200     0
                           4-   1     1     1       S3-4   12  E-   6          41-50     0         >200     0
                                                    S >5    0  I-   0           > 50     0        TOTAL  1045       TOTAL       11

 PROCESS CONTROL           0-   0     0     0       Q1-2    0  L-   2 P-   0   1-10     2        1- 50     5       IN-DPT     16
                           1-   3     3     3       Q3-4    1  R-   4 D-   0  11-20     2       51-100     1      OUT-DPT     12
                           2-   2     3     3       Q >5    0  T-   0 S-   0  21-30     1      101-150     0
                           3-   1     0     0       S1-2    1  A-   0 C-   0  31-40     1      151-200     0
                           4-   0     0     0       S3-4    4  E-   0          41-50     0         >200     0
                                                    S >5    0  I-   0           > 50     0        TOTAL   181       TOTAL       28

 DATA PREPARATION (KEY     0-   3     3     5       Q1-2    7  L-   4 P-  21   1-10    33        1- 50    65       IN-DPT    109
  PUNCH, VERIFIER, DATA    1-  22    21    23       Q3-4   24  R-  57 D-   0  11-20    46       51-100    22      OUT-DPT     66
  ENTRY,...)               2-  33    33    28       Q >5    4  T-   1 S-   0  21-30    15      101-150     6
                           3-  20    20    19       S1-2   32  A-   0 C-   0  31-40     4      151-200     5
                           4-  20    21    23       S3-4   30  E-   7          41-50     0         >200     1
                                                    S >5    1  I-   9           > 50     1        TOTAL  5360       TOTAL      175

 UNIT RECORD (EAM)         0-   3     3     4       Q1-2    2  L-   5 P-   2   1-10     3        1- 50    16       IN-DPT     12
                           1-  11    13    11       Q3-4    4  R-  12 D-   0  11-20     9       51-100     3      OUT-DPT     17
                           2-   3     3     5       Q >5    1  T-   0 S-   0  21-30     7      101-150     1
                           3-   3     1     0       S1-2    4  A-   0 C-   0  31-40     2      151-200     0
                           4-   1     1     1       S3-4    5  E-   2          41-50     0         >200     1
                                                    S >5    0  I-   0           > 50     0        TOTAL  1043       TOTAL       29

 INTRODUCTORY COURSE       0-   4     3     3       Q1-2    2  L-  81 P-   2   1-10    14        1- 50    76       IN-DPT    289
  IN DATA PROCESSING       1-  55    58    51       Q3-4   70  R- 112 D-   0  11-20    67       51-100    38      OUT-DPT    110
                           2-  73    64    71       Q >5   14  T-   0 S-   0  21-30   103      101-150    32
                           3-  76    79    78       S1-2   12  A-  21 C-   0  31-40    48      151-200    19
                           4-  40    44    45       S3-4  131  E-  30          41-50    11         >200    85
                                                    S >5    8  I-   4           > 50     7        TOTAL 54710       TOTAL      399

 ADVANCED COURSE IN DATA   0-   3     1     2       Q1-2    0  L-   7 P-   1   1-10    18        1- 50    38       IN-DPT      9
  PROCESSING               1-  25    25    24       Q3-4   18  R-  32 D-   0  11-20    18       51-100     9      OUT-DPT      0
                           2-  18    18    17       Q >5    1  T-   0 S-   1  21-30    11      101-150     0
                           3-   5     7     6       S1-2    9  A-   1 C-   0  31-40     5      151-200     5
                           4-   1     1     3       S3-4   24  E-   3          41-50     0         >200     0
                                                    S >5    0  I-   7           > 50     0        TOTAL  2211       TOTAL       10
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

SUMMARY BY COURSE TYPE
CONTINUED

GROUP (ASSOCIATE;)

COURSE DESCRIPTION	NUMBER OF TERMS OFFERED				CR HOURS QTR AND SEMESTER		MODE OF OPER				** AVERAGE **	SECT SIZE	*ENROLLMENT* * 1976-77 * NO.	FREQ*	COST COMPUTER SVCS * 1976-77 (THOUS$) ON AND OFF-CAMPUS	
		76-77	77-78	78-79							NO.					
PROBLEM SOLVING COURSE	0-	5	3	2	Q1-2	4	L-	18	P-	9	1-10	28	1- 50	60	IN-DPT	14
IN BUSINESS APPLI-	1-	39	43	45	Q3-4	25	R-	39	D-	0	11-20	31	51-100	9	OUT-DPT	1
CATIONS	2-	24	22	21	Q >5	12	T-	0	S-	1	21-30	15	101-150	4		
	3-	4	4	4	S1-2	6	A-	0	C-	0	31-40	3	151-200	1		
	4-	5	5	5	S3-4	25	E-	4			41-50	0	>200	3		
					S >5	1	I-	6			> 50	0	TOTAL	4094	TOTAL	15
ADVANCED BUSINESS APPLI-	0-	2	3	0	Q1-2	4	L-	3	P-	3	1-10	15	1- 50	27	IN-DPT	10
CATIONS (MARKETING,	1-	19	17	17	Q3-4	11	R-	19	D-	0	11-20	15	51-100	4	OUT-DPT	0
FINANCE, PRODUCTION,	2-	8	8	12	Q >5	3	T-	0	S-	1	21-30	3	101-150	2		
ETC.)	3-	4	5	4	S1-2	3	A-	0	C-	1	31-40	0	151-200	0		
	4-	0	0	0	S3-4	11	E-	3			41-50	0	>200	0		
					S >5	1	I-	3			> 50	0	TOTAL	904	TOTAL	10
INTRODUCTORY SYSTEMS	0-	9	8	6	Q1-2	3	L-	55	P-	1	1-10	31	1- 50	119	IN-DPT	8
ANALYSIS (BUSINESS)	1-	89	88	89	Q3-4	44	R-	54	D-	0	11-20	65	51-100	18	OUT-DPT	0
	2-	35	34	34	Q >5	14	T-	0	S-	1	21-30	37	101-150	0		
	3-	5	8	8	S1-2	1	A-	18	C-	0	31-40	9	151-200	1		
	4-	4	4	5	S3-4	76	E-	13			41-50	0	>200	4		
					S >5	2	I-	0			> 50	0	TOTAL	5554	TOTAL	8
LARGE SCALE INFORMATION	0-	1	1	0	Q1-2	0	L-	2	P-	0	1-10	2	1- 50	5	IN-DPT	1
PROCESSING SYSTEMS	1-	3	3	4	Q3-4	3	R-	4	D-	0	11-20	3	51-100	3	OUT-DPT	0
	2-	4	3	3	Q >5	1	T-	0	S-	0	21-30	2	101-150	0		
	3-	0	1	0	S1-2	0	A-	0	C-	0	31-40	1	151-200	0		
	4-	0	0	1	S3-4	4	E-	2			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	324	TOTAL	1
FILE ORGANIZATION	0-	1	0	0	Q1-2	0	L-	1	P-	0	1-10	1	1- 50	8	IN-DPT	0
	1-	5	5	5	Q3-4	5	R-	2	D-	0	11-20	6	51-100	2	OUT-DPT	0
	2-	3	3	3	Q >5	1	T-	0	S-	0	21-30	2	101-150	0		
	3-	1	2	2	S1-2	0	A-	2	C-	0	31-40	1	151-200	0		
	4-	0	0	0	S3-4	4	E-	5			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	371	TOTAL	0
DATA BASE MANAGEMENT	0-	1	0	0	Q1-2	1	L-	3	P-	0	1-10	3	1- 50	9	IN-DPT	0
	1-	7	7	7	Q3-4	4	R-	2	D-	0	11-20	5	51-100	3	OUT-DPT	0
	2-	4	5	5	Q >5	0	T-	0	S-	0	21-30	4	101-150	0		
	3-	0	0	0	S1-2	0	A-	2	C-	0	31-40	0	151-200	0		
	4-	0	0	0	S3-4	7	E-	5			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	364	TOTAL	0
INFORMATION SYSTEMS	0-	6	2	1	Q1-2	1	L-	14	P-	0	1-10	18	1- 50	49	IN-DPT	18
DESIGN (INTRODUCTORY)	1-	38	40	42	Q3-4	18	R-	32	D-	0	11-20	26	51-100	8	OUT-DPT	2
	2-	11	13	11	Q >5	2	T-	0	S-	0	21-30	14	101-150	0		
	3-	4	4	5	S1-2	2	A-	3	C-	0	31-40	1	151-200	1		
	4-	0	0	0	S3-4	33	E-	8			41-50	0	>200	1		
					S >5	1	I-	2			> 50	0	TOTAL	2149	TOTAL	20
INFORMATION SYSTEMS	0-	2	1	1	Q1-2	1	L-	2	P-	1	1-10	9	1- 50	23	IN-DPT	2
DESIGN (ADVANCED)	1-	22	20	20	Q3-4	11	R-	21	D-	0	11-20	9	51-100	3	OUT-DPT	2
	2-	1	4	2	Q >5	4	T-	0	S-	0	21-30	8	101-150	1		
	3-	0	0	2	S1-2	0	A-	1	C-	0	31-40	1	151-200	0		
	4-	2	2	2	S3-4	11	E-	2			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	763	TOTAL	4
MANAGEMENT INFORMATION	0-	2	1	0	Q1-2	0	L-	4	P-	0	1-10	4	1- 50	11	IN-DPT	0
SYSTEMS	1-	7	6	7	Q3-4	4	R-	4	D-	0	11-20	6	51-100	1	OUT-DPT	1
	2-	2	5	5	Q >5	0	T-	0	S-	1	21-30	2	101-150	1		
	3-	2	1	1	S1-2	0	A-	2	C-	0	31-40	1	151-200	0		
	4-	0	0	0	S3-4	9	E-	1			41-50	0	>200	0		
					S >5	0	I-	1			> 50	0	TOTAL	376	TOTAL	1
MANAGEMENT OF COMPUTER	0-	5	1	1	Q1-2	0	L-	6	P-	2	1-10	7	1- 50	11	IN-DPT	1
CENTERS OF INFORMATION	1-	3	8	8	Q3-4	5	R-	5	D-	0	11-20	3	51-100	4	OUT-DPT	0
PROCESSING DEPARTMENTS	2-	4	4	3	Q >5	0	T-	0	S-	0	21-30	6	101-150	2		
	3-	4	4	5	S1-2	3	A-	4	C-	0	31-40	1	151-200	1		
	4-	2	1	1	S3-4	10	E-	1			41-50	1	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	857	TOTAL	1
COMPUTERS AND ACCOUNTING	0-	3	1	1	Q1-2	1	L-	7	P-	0	1-10	3	1- 50	14	IN-DPT	1
(INCLUDING AUDITING)	1-	5	5	4	Q3-4	3	R-	8	D-	0	11-20	7	51-100	4	OUT-DPT	3
	2-	11	13	14	Q >5	0	T-	0	S-	1	21-30	8	101-150	1		
	3-	1	1	1	S1-2	3	A-	0	C-	1	31-40	2	151-200	0		
	4-	0	0	0	S3-4	13	E-	3			41-50	0	>200	1		
					S >5	0	I-	0			> 50	0	TOTAL	1020	TOTAL	4
ECONOMETRIC SIMULATION	0-	0	1	1	Q1-2	0	L-	1	P-	0	1-10	0	1- 50	2	IN-DPT	0
APPLICATIONS	1-	2	1	1	Q3-4	1	R-	0	D-	0	11-20	2	51-100	0	OUT-DPT	0
	2-	0	0	0	Q >5	0	T-	0	S-	0	21-30	0	101-150	0		
	3-	0	0	0	S1-2	0	A-	0	C-	0	31-40	0	151-200	0		
	4-	0	0	0	S3-4	1	E-	1			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	49	TOTAL	0

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                                                   SUMMARY BY CCURSE TYPE
   GROUP I          ASSOCIATE:            )        CONTINUED
                        NUMBER  OF  TERMS            CR HCURS                           **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
COURSE DESCKIPTION          OFFERED                  QTR AND                                  SECT     * 1976-77   * 1976-77 (THOUS$)
                       76-77 77-78 78-79             SEMESTER   MCDE CF OPER          NO.     SIZE     * NO.  FREQ* ON AND OFF-CAMPUS

COMPUTER BASED         0-   1     0     0            Q1-2    0  L-   0 P-   0   1-10      2       1- 50    3      IN-DPT       1
INSTRUCTION            1-   3     4     4            Q3-4    2  R-   5 D-   0  11-20      2      51-100    2     OUT-DPT       0
                       2-   1     0     1            Q >5    0  T-   0 S-   0  21-30      1     101-150    0
                       3-   0     1     0            S1-2    1  A-   0 C-   0  31-40      0     151-200    0
                       4-   0     0     0            S3-4    2  E-   0         41-50      0        >200    0
                                                     S >5    0  I-   1          > 50      0       TOTAL  196      TOTAL        1

OTHER                  0-  26    13    14            Q1-2   14  L-  30 P-  28   1-10     82       1- 50  149      IN-DPT       4
                       1-  74    86    79            Q3-4   31  R-  82 D-   0  11-20     78      51-100   29     OUT-DPT      37
                       2-  63    63    69            Q >5    9  T-   0 S-   5  21-30     33     101-150   13
                       3-  23    25    24            S1-2   32  A-   3 C-   0  31-40      4     151-200    3
                       4-  12    11    12            S3-4  108  E-  19         41-50      1        >200    4
                                                     S >5    2  I-  31          > 50      0       TOTAL 7921      TOTAL       41

DESCRIPTICN NOT CODED  0-   8     4     6            Q1-2    0  L-  37 P-   0   1-10     11       1- 50   22      IN-DPT       4
                       1-  11    13    14            Q3-4    5  R-   2 D-   0  11-20     11      51-100    8     OUT-DPT       0
                       2-   8     9     6            Q >5    2  T-   0 S-   0  21-30     20     101-150    3
                       3-  15    16    16            S1-2    2  A-   2 C-   0  31-40      0     151-200    1
                       4-   0     0     0            S3-4   33  E-   0         41-50      0        >200    8
                                                     S >5    0  I-   1          > 50      0       TOTAL 6319      TOTAL        4
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                                                  SUMMARY BY COURSE TYPE
   GROUP 1          BACHELORS:           )
                          NUMBER  OF  TERMS             CR HOURS                               **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTION            OFFERED                  QTR AND                                      SECT     * 1976-77  * 1976-77 (THOUS$)
                          76-77 77-78 78-79             SEMESTER     MODE OF OPER          NO.   SIZE     * NO.  FREQ* ON AND OFF-CAMPUS

COMPUTER APPRECIATION     0-   7     8     9            Q1-2     3  L-  15 P-   0   1-10    12        1- 50    31      IN-DPT      6
                          1-  18    19    19            Q3-4     2  R-  27 D-   0  11-20     9       51-100    10      OUT-DPT     0
                          2-  14    10     9            Q >5     2  T-   0 S-   0  21-30    15      101-150     2
                          3-   9    10     9            S1-2     9  A-   2 C-   0  31-40     5      151-200     3
                          4-   1     2     3            S3-4    21  E-   5         41-50     2         >200     3
                                                        S >5     0  I-   0          > 50     6        TOTAL  3187      TOTAL       6

PROBLEM SOLVING COURSE    0-   1     0     1            Q1-2     0  L-   0 P-   0   1-10     5        1- 50    10      IN-DPT      0
 IN THE HUMANITIES        1-   8     9     8            Q3-4     1  R-  11 D-   0  11-20     3       51-100     1      OUT-DPT     0
                          2-   2     2     2            Q >5     0  T-   0 S-   0  21-30     1      101-150     0
                          3-   0     0     0            S1-2     0  A-   0 C-   0  31-40     1      151-200     0
                          4-   0     0     0            S3-4     9  E-   0         41-50     1         >200     0
                                                        S >5     0  I-   0          > 50     0        TOTAL   229      TOTAL       0

INTRODUCTORY COURSE IN    0-  30    17    27            Q1-2    15  L-  42 P-   9   1-10    69        1- 50   171      IN-DPT    155
 SOME COMPILER LANGUAGE   1-  95    99    92            Q3-4    25  R- 177 D-   0  11-20    82       51-100    45      OUT-DPT    85
 SUCH AS FORTRAN, PL/1,   2-  78    81    77            Q >5     7  T-   1 S-   1  21-30    62      101-150    15
 BASIC, ALGOL             3-  29    34    37            S1-2    25  A-   1 C-   0  31-40    27      151-200    11
                          4-  13    15    14            S3-4   126  E-  16         41-50     5         >200     7
                                                        S >5     1  I-   2          > 50     4        TOTAL 12321      TOTAL     239

INTRODUCTORY COURSE IN A  0-  17    16    12            Q1-2     3  L-  12 P-   1   1-10    41        1- 50    89      IN-DPT     18
 LANGUAGE SUCH AS COBOL   1-  58    60    61            Q3-4    10  R-  83 D-   0  11-20    38       51-100    10      OUT-DPT    63
                          2-  18    18    21            Q >5     5  T-   1 S-   0  21-30    22      101-150     4
                          3-  11    10    10            S1-2     3  A-   0 C-   0  31-40     2      151-200     1
                          4-   2     2     2            S3-4    78  E-   8         41-50     3         >200     2
                                                        S >5     0  I-   1          > 50     0        TOTAL  3479      TOTAL      81

PROBLEM SOLVING COURSE    0-   7     9     3            Q1-2     3  L-   5 P-   0   1-10    21        1- 50    50      IN-DPT      2
 IN ENGINEERING OR        1-  39    37    43            Q3-4     3  R-  48 D-   0  11-20    21       51-100     3      OUT-DPT     1
 SCIENTIFIC APPLI-        2-   5     5     5            Q >5     0  T-   1 S-   0  21-30     7      101-150     1
 CATIONS                  3-   2     3     3            S1-2     3  A-   0 C-   0  31-40     3      151-200     1
                          4-   2     1     1            S3-4    40  E-   1         41-50     2         >200     0
                                                        S >5     1  I-   0          > 50     1        TOTAL  1346      TOTAL       3

INTRODUCTORY COURSE IN    0-   5     3     5            Q1-2     1  L-   6 P-   1   1-10    15        1- 50    39      IN-DPT     28
 PROGRAMMING              1-  24    27    27            Q3-4     5  R-  45 D-   0  11-20    17       51-100    13      OUT-DPT     2
                          2-  22    20    16            Q >5     4  T-   0 S-   0  21-30    15      101-150     4
                          3-   5     5     8            S1-2     7  A-   0 C-   0  31-40     6      151-200     1
                          4-   1     2     1            S3-4    29  E-   3         41-50     3         >200     0
                                                        S >5     0  I-   0          > 50     1        TOTAL  2374      TOTAL      30

ADVANCED COURSE IN        0-  14    14    16            Q1-2     1  L-  11 P-   0   1-10    50        1- 50    93      IN-DPT     11
 PROGRAMMING              1-  67    72    68            Q3-4    14  R-  84 D-   0  11-20    35       51-100     6      OUT-DPT    44
                          2-  16    11    13            Q >5     5  T-   0 S-   2  21-30    10      101-150     2
                          3-   3     3     3            S1-2     3  A-   0 C-   0  31-40     4      151-200     0
                          4-   1     1     1            S3-4    67  E-   2         41-50     1         >200     0
                                                        S >5     0  I-   2          > 50     1        TOTAL  1769      TOTAL      55

FIRST COURSE IN COMPUTER  0-   3     4     1            Q1-2     0  L-   2 P-   0   1-10    10        1- 50    16      IN-DPT      0
 DESIGN                   1-  13    12    14            Q3-4     1  R-  14 D-   0  11-20     5       51-100     0      OUT-DPT     0
                          2-   0     0     1            Q >5     0  T-   0 S-   0  21-30     1      101-150     0
                          3-   0     0     0            S1-2     1  A-   0 C-   0  31-40     0      151-200     0
                          4-   0     0     0            S3-4     6  E-   0         41-50     0         >200     0
                                                        S >5     0  I-   0          > 50     0        TOTAL   173      TOTAL       0

ADVANCED COURSE IN COM-   0-   2     1     1            Q1-2     0  L-   1 P-   0   1-10     5        1- 50     6      IN-DPT      0
 PUTER DESIGN (COMPUTER   1-   2     3     2            Q3-4     3  R-   5 D-   0  11-20     1       51-100     1      OUT-DPT     0
 ARCHITECTURE)            2-   1     1     2            Q >5     0  T-   0 S-   0  21-30     1      101-150     0
                          3-   0     0     0            S1-2     1  A-   0 C-   0  31-40     0      151-200     0
                          4-   2     2     2            S3-4     2  E-   1         41-50     0         >200     0
                                                        S >5     0  I-   0          > 50     0        TOTAL   102      TOTAL       0

PROGRAMMING LANGUAGES     0-  13     7    14            Q1-2     2  L-   6 P-   0   1-10    24        1- 50    33      IN-DPT      0
 (STRUCTURE, ETC.)        1-  15    23    17            Q3-4     4  R-  25 D-   0  11-20     9       51-100     2      OUT-DPT     0
                          2-   4     3     2            Q >5     3  T-   0 S-   1  21-30     2      101-150     0
                          3-   1     0     0            S1-2     0  A-   0 C-   0  31-40     0      151-200     0
                          4-   2     2     2            S3-4    22  E-   2         41-50     0         >200     0
                                                        S >5     0  I-   1          > 50     0        TOTAL   385      TOTAL       0

OPERATING SYSTEMS         0-   8     6     7            Q1-2     2  L-   4 P-   0   1-10    19        1- 50    26      IN-DPT      2
 (SYSTEMS PROGRAMMING,    1-  16    19    17            Q3-4     5  R-  20 D-   0  11-20     4       51-100     2      OUT-DPT     0
 ETC.)                    2-   3     2     3            Q >5     1  T-   1 S-   1  21-30     5      101-150     0
                          3-   0     0     0            S1-2     1  A-   0 C-   0  31-40     0      151-200     0
                          4-   1     1     1            S3-4    16  E-   2         41-50     0         >200     0
                                                        S >5     0  I-   0          > 50     0        TOTAL   397      TOTAL       2

DATA STRUCTURES           0-  21    11    16            Q1-2     3  L-   9 P-   1   1-10    33        1- 50    45      IN-DPT      1
                          1-  22    32    26            Q3-4     4  R-  32 D-   0  11-20     9       51-100     0      OUT-DPT     1
                          2-   1     1     2            Q >5     2  T-   0 S-   1  21-30     3      101-150     0
                          3-   0     0     0            S1-2     0  A-   1 C-   0  31-40     0      151-200     0
                          4-   1     1     1            S3-4    27  E-   1         41-50     0         >200     0
                                                        S >5     0  I-   0          > 50     0        TOTAL   295      TOTAL       1
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
              CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA                PAGE X-24
                      UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION

                                                SUMMARY BY COURSE TYPE
  GROUP 1          BACHELORS:             1      CONTINUED
                              NUMBER  OF  TERMS       CR HOURS                       **  AVERAGE **  *ENROLLMENT* COST COMPUTER SVCS
                                   OFFERED            QTR AND                                SECT    * 1976-77  * 1976-77 (THOUS$)
 COURSE DESCRIPTION           76-77 77-78 78-79       SEMESTER    MODE OF OPER       NO.    SIZE    * NO.   FREQ* ON AND OFF-CAMPUS

AUTOMATA THEORY               0-    0    1    0      Q1-2   0  L-  0 P-  0    1-10   2     1- 50    3    IN-OPT      0
                              1-    2    1    2      Q3-4   2  R-  2 D-  0   11-20   0    51-100    0    OUT-OPT     0
                              2-    0    0    0      Q >5   0  T-  0 S-  0   21-30   1   101-150    0
                              3-    1    1    1      S1-2   0  A-  0 C-  0   31-40   0   151-200    0
                              4-    0    0    0      S3-4   1  E-  1         41-50   0      >200    0
                                                     S >5   0  I-  0          > 50   0     TOTAL   42    TOTAL       0

SIMULATION APPLICATIONS       0-    0    2    0      Q1-2   0  L-  2 P-  0    1-10   3     1- 50    9    IN-OPT      0
 (NON-ECONOMETRIC)            1-    9    7    9      Q3-4   0  R-  7 D-  0   11-20   3    51-100    0    OUT-OPT     0
                              2-    0    0    0      Q >5   0  T-  0 S-  0   21-30   1   101-150    0
                              3-    0    0    0      S1-2   0  A-  0 C-  0   31-40   2   151-200    0
                              4-    0    0    0      S3-4   8  E-  0         41-50   0      >200    0
                                                     S >5   0  I-  0          > 50   0     TOTAL  196    TOTAL       0

SIMULATION LANGUAGES          0-    3    4    2      Q1-2   1  L-  4 P-  0    1-10   6     1- 50   10    IN-OPT      1
 AND/OR TECHNIQUES            1-    6    6    8      Q3-4   1  R-  7 D-  0   11-20   4    51-100    1    OUT-OPT     0
                              2-    1    0    0      Q >5   0  T-  0 S-  0   21-30   1   101-150    0
                              3-    1    1    1      S1-2   1  A-  0 C-  0   31-40   0   151-200    0
                              4-    0    0    0      S3-4   7  E-  0         41-50   0      >200    0
                                                     S >5   0  I-  0          > 50   0     TOTAL  157    TOTAL       1

ARTIFICIAL INTELLIGENCE       0-    0    0    0      Q1-2   0  L-  1 P-  0    1-10   1     1- 50    1    IN-OPT      1
 (HEURISTIC PROGRAMMING)      1-    1    1    1      Q3-4   0  R-  0 D-  0   11-20   0    51-100    0    OUT-OPT     0
                              2-    0    0    0      Q >5   0  T-  0 S-  0   21-30   0   101-150    0
                              3-    0    0    0      S1-2   0  A-  0 C-  0   31-40   0   151-200    0
                              4-    0    0    0      S3-4   1  E-  0         41-50   0      >200    0
                                                     S >5   0  I-  0          > 50   0     TOTAL   10    TOTAL       1

DISCRETE STRUCTURES           0-    6    5    6      Q1-2   0  L-  7 P-  0    1-10  10     1- 50   14    IN-OPT      0
                              1-    7    9    7      Q3-4   0  R-  7 D-  0   11-20   3    51-100    0    OUT-OPT    10
                              2-    1    0    1      Q >5   1  T-  0 S-  0   21-30   1   101-150    0
                              3-    0    0    0      S1-2   1  A-  0 C-  0   31-40   0   151-200    0
                              4-    0    0    0      S3-4  10  E-  0         41-50   0      >200    0
                                                     S >5   0  I-  0          > 50   0     TOTAL  108    TOTAL      10

COMPUTER ORGANIZATION         0-    7    7    3      Q1-2   3  L-  5 P-  0    1-10   9     1- 50   22    IN-OPT     19
                              1-   14   13   18      Q3-4   5  R- 17 D-  0   11-20  15    51-100    3    OUT-OPT     1
                              2-    2    3    2      Q >5   1  T-  2 S-  0   21-30   1   101-150    0
                              3-    2    2    2      S1-2   2  A-  1 C-  0   31-40   0   151-200    0
                              4-    0    0    0      S3-4  14  E-  0         41-50   0      >200    0
                                                     S >5   0  I-  0          > 50   0     TOTAL  474    TOTAL      19

SWITCHING THEORY              0-    1    1    1      Q1-2   0  L-  1 P-  0    1-10   1     1- 50    2    IN-OPT     17
                              1-    1    1    1      Q3-4   1  R-  2 D-  0   11-20   1    51-100    1    OUT-OPT     0
                              2-    0    0    0      Q >5   0  T-  0 S-  0   21-30   1   101-150    0
                              3-    1    1    1      S1-2   0  A-  0 C-  0   31-40   0   151-200    0
                              4-    0    0    0      S3-4   2  E-  0         41-50   0      >200    0
                                                     S >5   0  I-  0          > 50   0     TOTAL   83    TOTAL      17

SEQUENTIAL MACHINES           0-    0    0    0      Q1-2   0  L-  1 P-  0    1-10   1     1- 50    1    IN-OPT     17
                              1-    1    1    1      Q3-4   1  R-  1 D-  0   11-20   0    51-100    1    OUT-OPT     0
                              2-    0    0    1      Q >5   0  T-  0 S-  0   21-30   1   101-150    0
                              3-    1    1    0      S1-2   0  A-  0 C-  0   31-40   0   151-200    0
                              4-    0    0    0      S3-4   1  E-  0         41-50   0      >200    0
                                                     S >5   0  I-  0          > 50   0     TOTAL   79    TOTAL      17

COMPILER CONSTRUCTION         0-    3    6    2      Q1-2   1  L-  3 P-  0    1-10  10     1- 50   14    IN-OPT      0
                              1-   10    7   11      Q3-4   2  R- 10 D-  0   11-20   3    51-100    0    OUT-OPT     0
                              2-    1    1    1      Q >5   1  T-  0 S-  0   21-30   1   101-150    0
                              3-    0    0    0      S1-2   0  A-  0 C-  0   31-40   0   151-200    0
                              4-    0    0    0      S3-4   5  E-  1         41-50   0      >200    0
                                                     S >5   0  I-  0          > 50   0     TOTAL  113    TOTAL       0

FORMAL LANGUAGES AND          0-    1    3    0      Q1-2   1  L-  2 P-  0    1-10   4     1- 50    5    IN-OPT      0
 SYNTACTIC ANALYSIS           1-    4    2    5      Q3-4   2  R-  3 D-  0   11-20   1    51-100    0    OUT-OPT     0
                              2-    0    0    0      Q >5   0  T-  0 S-  0   21-30   0   101-150    0
                              3-    0    0    0      S1-2   0  A-  0 C-  0   31-40   0   151-200    0
                              4-    0    0    0      S3-4   2  E-  0         41-50   0      >200    0
                                                     S >5   0  I-  0          > 50   0     TOTAL   27    TOTAL       0

INTRODUCTORY COMPUTER         0-    4    4    3      Q1-2   0  L-  2 P-  0    1-10   8     1- 50   10    IN-OPT      0
 ORGANIZATION                 1-    5    6    7      Q3-4   2  R-  8 D-  0   11-20   1    51-100    1    OUT-OPT     0
                              2-    1    1    1      Q >5   1  T-  0 S-  0   21-30   1   101-150    0
                              3-    1    0    0      S1-2   0  A-  0 C-  0   31-40   1   151-200    0
                              4-    0    0    0      S3-4   7  E-  1         41-50   0      >200    0
                                                     S >5   0  I-  0          > 50   0     TOTAL  122    TOTAL       0

ADVANCED COMPUTER             0-    2    1    2      Q1-2   1  L-  1 P-  0    1-10   4     1- 50    8    IN-OPT      0
 ORGANIZATION                 1-    4    5    4      Q3-4   3  R-  5 D-  0   11-20   4    51-100    0    OUT-OPT     0
                              2-    1    1    1      Q >5   0  T-  1 S-  0   21-30   0   101-150    0
                              3-    1    1    1      S1-2   0  A-  0 C-  0   31-40   0   151-200    0
                              4-    0    0    0      S3-4   4  E-  1         41-50   0      >200    0
                                                     S >5   0  I-  0          > 50   0     TOTAL  121    TOTAL       0
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                                                   SUMMARY BY COURSE TYPE
      GROUP (          BACHELORS)           )      CONTINUED
                          NUMBER  OF  TERMS           CR HOURS                                ** AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
  COURSE DESCRIPTION          OFFERED                 QTR AND                                      SECT     * 1976-77  * 1976-77 (THOUS$)
                          76-77 77-78 78-79           SEMESTER   MODE OF OPER       NO.    SIZE     * NO.  FREQ* ON AND OFF-CAMPUS

INFORMATION STORAGE      0-   1     0     1           Q1-2    0  L-   1 P-   0    1-10      4        1- 50     6        IN-DPT     0
 AND RETRIEVAL           1-   4     5     4           Q3-4    2  R-   4 D-   0   11-20      1       51-100     0       OUT-DPT     0
                         2-   1     1     1           Q >5    0  T-   0 S-   0   21-30      1      101-150     0
                         3-   0     0     0           S1-2    0  A-   0 C-   0   31-40      0      151-200     0
                         4-   0     0     0           S3-4    2  E-   1          41-50      0         >200     0
                                                      S >5    0  I-   0           > 50      0        TOTAL    88        TOTAL      0

COMPUTER GRAPHICS        0-   1     0     1           Q1-2    0  L-   0 P-   0    1-10      2        1- 50     2        IN-DPT     0
                         1-   1     2     1           Q3-4    0  R-   1 D-   0   11-20      0       51-100     0       OUT-DPT     0
                         2-   0     0     0           Q >5    0  T-   0 S-   0   21-30      0      101-150     0
                         3-   0     0     0           S1-2    0  A-   0 C-   0   31-40      0      151-200     0
                         4-   0     0     0           S3-4    2  E-   0          41-50      0         >200     0
                                                      S >5    0  I-   1           > 50      0        TOTAL     2        TOTAL      0

COMPUTABILITY            0-   3     1     1           Q1-2    1  L-   4 P-   0    1-10      3        1- 50     4        IN-DPT     0
                         1-   0     2     2           Q3-4    0  R-   0 D-   0   11-20      1       51-100     0       OUT-DPT     0
                         2-   1     1     1           Q >5    0  T-   0 S-   0   21-30      0      101-150     0
                         3-   0     0     0           S1-2    1  A-   0 C-   0   31-40      0      151-200     0
                         4-   0     0     0           S3-4    2  E-   0          41-50      0         >200     0
                                                      S >5    0  I-   0           > 50      0        TOTAL    40        TOTAL      0

INTRODUCTORY NUMERICAL   0-  18    16    16           Q1-2    4  L-  17 P-   0    1-10     41        1- 50    59        IN-DPT     8
 ANALYSIS (OR METHODS)   1-  35    37    37           Q3-4    3  R-  38 D-   0   11-20     13       51-100     0       OUT-DPT     1
                         2-   6     7     7           Q >5    1  T-   1 S-   1   21-30      6      101-150     0
                         3-   1     0     0           S1-2    0  A-   0 C-   0   31-40      0      151-200     0
                         4-   0     0     0           S3-4   35  E-   0          41-50      0         >200     1
                                                      S >5    0  I-   3           > 50      0        TOTAL   907        TOTAL      9

ADVANCED NUMERICAL       0-   1     3     1           Q1-2    1  L-   4 P-   0    1-10      9        1- 50    14        IN-DPT     2
 ANALYSIS                1-   9     7     9           Q3-4    0  R-  10 D-   0   11-20      1       51-100     0       OUT-DPT     0
                         2-   4     4     4           Q >5    0  T-   0 S-   0   21-30      4      101-150     0
                         3-   0     0     0           S1-2    2  A-   0 C-   0   31-40      0      151-200     0
                         4-   0     0     0           S3-4    5  E-   0          41-50      0         >200     0
                                                      S >5    0  I-   0           > 50      0        TOTAL   239        TOTAL      2

INTRODUCTORY OPERATIONS  0-   3     3     4           Q1-2    1  L-   7 P-   0    1-10      3        1- 50    16        IN-DPT     0
 RESEARCH                1-  12    12    11           Q3-4    0  R-   4 D-   0   11-20      8       51-100     0       OUT-DPT     0
                         2-   1     1     1           Q >5    0  T-   1 S-   0   21-30      3      101-150     0
                         3-   0     0     0           S1-2    2  A-   2 C-   0   31-40      2      151-200     0
                         4-   0     0     0           S3-4   12  E-   2          41-50      0         >200     0
                                                      S >5    0  I-   0           > 50      0        TOTAL   267        TOTAL      0

ADVANCED OPERATIONS      0-   0     5     5           Q1-2    1  L-   5 P-   0    1-10      4        1- 50    10        IN-DPT     3
 RESEARCH                1-  10     6     6           Q3-4    0  R-   4 D-   0   11-20      5       51-100     1       OUT-DPT     0
                         2-   1     0     0           Q >5    0  T-   0 S-   0   21-30      1      101-150     0
                         3-   0     0     0           S1-2    5  A-   2 C-   0   31-40      1      151-200     0
                         4-   0     0     0           S3-4    5  E-   0          41-50      0         >200     0
                                                      S >5    0  I-   0           > 50      0        TOTAL   260        TOTAL      3

DATA COMMUNICATIONS      0-   0     1     1           Q1-2    0  L-   0 P-   0    1-10      0        1- 50     2        IN-DPT     4
                         1-   2     1     1           Q3-4    2  R-   1 D-   0   11-20      1       51-100     0       OUT-DPT     0
                         2-   0     0     0           Q >5    0  T-   0 S-   0   21-30      1      101-150     0
                         3-   0     0     0           S1-2    0  A-   0 C-   0   31-40      0      151-200     0
                         4-   0     0     0           S3-4    0  E-   1          41-50      0         >200     0
                                                      S >5    0  I-   0           > 50      0        TOTAL    33        TOTAL      4

PROCESS CONTROL          0-   1     3     2           Q1-2    0  L-   2 P-   0    1-10      3        1- 50     7        IN-DPT     0
                         1-   5     3     4           Q3-4    1  R-   5 D-   0   11-20      2       51-100     0       OUT-DPT     0
                         2-   0     0     0           Q >5    0  T-   0 S-   0   21-30      2      101-150     0
                         3-   0     0     0           S1-2    0  A-   0 C-   0   31-40      0      151-200     0
                         4-   1     1     1           S3-4    6  E-   0          41-50      0         >200     0
                                                      S >5    0  I-   0           > 50      0        TOTAL   125        TOTAL      0

DATA PREPARATION (KEY    0-   1     4     2           Q1-2    3  L-   1 P-   0    1-10      6        1- 50     9        IN-DPT     3
 PUNCH, VERIFIER, DATA   1-   2     1     2           Q3-4    0  R-   8 D-   0   11-20      3       51-100     0       OUT-DPT     0
 ENTRY....)              2-   4     3     4           Q >5    0  T-   0 S-   0   21-30      0      101-150     0
                         3-   2     1     1           S1-2    4  A-   0 C-   0   31-40      1      151-200     1
                         4-   1     1     1           S3-4    2  E-   0          41-50      0         >200     0
                                                      S >5    0  I-   1           > 50      0        TOTAL   318        TOTAL      3

UNIT RECORD (EAM)        0-   0     1     1           Q1-2    0  L-   0 P-   0    1-10      0        1- 50     4        IN-DPT     0
                         1-   4     3     3           Q3-4    2  R-   4 D-   0   11-20      1       51-100     0       OUT-DPT     0
                         2-   0     0     0           Q >5    0  T-   0 S-   0   21-30      2      101-150     0
                         3-   0     0     0           S1-2    0  A-   0 C-   0   31-40      1      151-200     0
                         4-   0     0     0           S3-4    2  E-   0          41-50      0         >200     0
                                                      S >5    0  I-   0           > 50      0        TOTAL    86        TOTAL      0

INTRODUCTORY COURSE      0-   4     3     4           Q1-2    0  L-  14 P-   0    1-10      5        1- 50    28        IN-DPT    11
 IN DATA PROCESSING      1-  18    17    17           Q3-4    7  R-  23 D-   0   11-20     12       51-100    12       OUT-DPT    21
                         2-  19    21    20           Q >5    0  T-   2 S-   0   21-30     14      101-150     2
                         3-   6     6     6           S1-2    0  A-   4 C-   0   31-40     14      151-200     1
                         4-   3     3     3           S3-4   37  E-   6          41-50      4         >200     7
                                                      S >5    0  I-   1           > 50      1        TOTAL  5728        TOTAL     32
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                                                  SUMMARY BY COURSE TYPE
     GROUP I          BACHELORS:           )      CONTINUED
                           NUMBER  OF  TERMS        CR HOURS                           **  AVERAGE **  *ENROLLMENT* COST COMPUTER SVCS
                                OFFERED             QTR AND                                SECT        * 1976-77  * 1976-77 (THOUS$)
  COURSE DESCRIPTION      76-77 77-78 78-79         SEMESTER   MODE OF OPER      NO.    SIZE        * NO.  FREQ* ON AND OFF-CAMPUS

ADVANCED COURSE IN DATA  0-   1     2     0         Q1-2    0  L-   2 P-   2   1-10     5           1- 50    7        IN-DPT      0
 PROCESSING              1-   6     4     7         Q3-4    2  R-   5 D-   0  11-20     2          51-100    1       OUT-DPT      1
                         2-   0     1     0         Q >5    0  T-   0 S-   0  21-30     1         101-150    0
                         3-   2     2     2         S1-2    0  A-   0 C-   0  31-40     1         151-200    0
                         4-   0     0     0         S3-4    5  E-   0         41-50     0            >200    1
                                                    S >5    0  I-   0          > 50     0           TOTAL  733       TOTAL         1

PROBLEM SOLVING COURSE   0-   2     1     1         Q1-2    1  L-   4 P-   1   1-10     8           1- 50   11        IN-DPT      1
 IN BUSINESS APPLI-      1-   6     6     6         Q3-4    2  R-   5 D-   0  11-20     3          51-100    1       OUT-DPT      0
 CATIONS                 2-   4     5     5         Q >5    0  T-   0 S-   1  21-30     0         101-150    0
                         3-   0     0     0         S1-2    1  A-   0 C-   0  31-40     1         151-200    0
                         4-   0     0     0         S3-4    6  E-   1         41-50     0            >200    0
                                                    S >5    0  I-   0          > 50     0           TOTAL  190       TOTAL         1

ADVANCED BUSINESS APPLI- 0-   2     1     1         Q1-2    0  L-   2 P-   0   1-10     4           1- 50    5        IN-DPT      1
 CATIONS (MARKETING,     1-   2     3     3         Q3-4    1  R-   2 D-   0  11-20     1          51-100    1       OUT-DPT      0
 FINANCE, PRODUCTION,    2-   1     1     1         Q >5    0  T-   0 S-   1  21-30     1         101-150    0
 ETC.)                   3-   1     1     1         S1-2    0  A-   0 C-   0  31-40     0         151-200    0
                         4-   0     0     0         S3-4    5  E-   1         41-50     0            >200    0
                                                    S >5    0  I-   0          > 50     0           TOTAL  116       TOTAL         1

INTRODUCTORY SYSTEMS     0-   2     2     4         Q1-2    0  L-   8 P-   0   1-10     3           1- 50   14        IN-DPT      0
 ANALYSIS (BUSINESS)     1-  11    11     9         Q3-4    2  R-   7 D-   0  11-20     5          51-100    3       OUT-DPT      1
                         2-   3     3     3         Q >5    0  T-   1 S-   0  21-30     8         101-150    1
                         3-   2     2     2         S1-2    0  A-   2 C-   0  31-40     2         151-200    0
                         4-   0     0     0         S3-4   16  E-   0         41-50     0            >200    0
                                                    S >5    0  I-   0          > 50     0           TOTAL  673       TOTAL         1

LARGE SCALE INFORMATION  0-   2     1     1         Q1-2    0  L-   1 P-   0   1-10     2           1- 50    4        IN-DPT      1
 PROCESSING SYSTEMS      1-   1     2     2         Q3-4    1  R-   3 D-   0  11-20     2          51-100    0       OUT-DPT      0
                         2-   1     1     1         Q >5    0  T-   0 S-   0  21-30     0         101-150    0
                         3-   0     0     0         S1-2    0  A-   0 C-   0  31-40     0         151-200    0
                         4-   0     0     0         S3-4    3  E-   0         41-50     0            >200    0
                                                    S >5    0  I-   0          > 50     0           TOTAL   53       TOTAL         1

FILE ORGANIZATION        0-   3     0     0         Q1-2    0  L-   2 P-   0   1-10     2           1- 50    5        IN-DPT      0
                         1-   1     4     4         Q3-4    1  R-   3 D-   0  11-20     3          51-100    1       OUT-DPT      0
                         2-   2     2     2         Q >5    0  T-   1 S-   0  21-30     1         101-150    0
                         3-   0     0     0         S1-2    1  A-   0 C-   0  31-40     0         151-200    0
                         4-   0     0     0         S3-4    4  E-   0         41-50     0            >200    0
                                                    S >5    0  I-   0          > 50     0           TOTAL  123       TOTAL         0

DATA BASE MANAGEMENT     0-   3     1     1         Q1-2    0  L-   2 P-   0   1-10     5           1- 50    5        IN-DPT      0
                         1-   2     4     4         Q3-4    2  R-   4 D-   0  11-20     0          51-100    1       OUT-DPT      0
                         2-   0     0     0         Q >5    1  T-   0 S-   0  21-30     1         101-150    0
                         3-   1     1     1         S1-2    0  A-   0 C-   0  31-40     0         151-200    0
                         4-   0     0     0         S3-4    3  E-   0         41-50     0            >200    0
                                                    S >5    0  I-   0          > 50     0           TOTAL   78       TOTAL         0

INFORMATION SYSTEMS      0-   5     3     2         Q1-2    0  L-   9 P-   0   1-10     8           1- 50   18        IN-DPT      1
 DESIGN (INTRODUCTORY)   1-  12    13    15         Q3-4    5  R-   8 D-   0  11-20     9          51-100    2       OUT-DPT      0
                         2-   2     3     2         Q >5    1  T-   1 S-   1  21-30     3         101-150    1
                         3-   3     3     3         S1-2    2  A-   1 C-   0  31-40     2         151-200    1
                         4-   0     0     0         S3-4   14  E-   2         41-50     0            >200    0
                                                    S >5    0  I-   0          > 50     0           TOTAL  675       TOTAL         1

INFORMATION SYSTEMS      0-   2     4     2         Q1-2    0  L-   6 P-   0   1-10     4           1- 50   13        IN-DPT      2
 DESIGN (ADVANCED)       1-   8     6     8         Q3-4    2  R-   5 D-   0  11-20     8          51-100    0       OUT-DPT      0
                         2-   3     3     2         Q >5    0  T-   1 S-   0  21-30     1         101-150    0
                         3-   0     0     1         S1-2    1  A-   1 C-   0  31-40     0         151-200    0
                         4-   0     0     0         S3-4   10  E-   0         41-50     0            >200    0
                                                    S >5    0  I-   0          > 50     0           TOTAL  221       TOTAL         2

MANAGEMENT INFORMATION   0-   2     3     2         Q1-2    1  L-   9 P-   0   1-10     1           1- 50   16        IN-DPT      0
 SYSTEMS                 1-  11     9    11         Q3-4    3  R-  10 D-   0  11-20    11          51-100    2       OUT-DPT      0
                         2-   5     6     5         Q >5    0  T-   0 S-   0  21-30     3         101-150    1
                         3-   1     1     1         S1-2    1  A-   0 C-   0  31-40     3         151-200    0
                         4-   0     0     0         S3-4   13  E-   0         41-50     1            >200    0
                                                    S >5    0  I-   0          > 50     0           TOTAL  634       TOTAL         0

MANAGEMENT OF COMPUTER   0-   0     3     2         Q1-2    0  L-   0 P-   1   1-10     3           1- 50    4        IN-DPT      0
 CENTERS OF INFORMATION  1-   3     1     2         Q3-4    2  R-   2 D-   0  11-20     1          51-100    1       OUT-DPT      0
  PROCESSING DEPARTMENTS 2-   1     0     0         Q >5    0  T-   0 S-   2  21-30     1         101-150    0
                         3-   1     1     1         S1-2    0  A-   0 C-   0  31-40     0         151-200    0
                         4-   0     0     0         S3-4    3  E-   0         41-50     0            >200    0
                                                    S >5    0  I-   0          > 50     0           TOTAL   86       TOTAL         0

COMPUTERS AND ACCOUNTING 0-   0     3     3         Q1-2    0  L-   2 P-   0   1-10     1           1- 50    5        IN-DPT      1
 (INCLUDING AUDITING)    1-   4     1     1         Q3-4    0  R-   2 D-   0  11-20     3          51-100    0       OUT-DPT      0
                         2-   1     1     1         Q >5    0  T-   0 S-   1  21-30     1         101-150    0
                         3-   0     0     0         S1-2    0  A-   0 C-   0  31-40     0         151-200    0
                         4-   0     0     0         S3-4    3  E-   0         41-50     0            >200    0
                                                    S >5    0  I-   0          > 50     0           TOTAL  102       TOTAL         1
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                         UNDER A GRANT FROM THE NATIONAL SCIENCE FOUNDATION
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                                                 SUMMARY BY COURSE TYPE
  GROUP I          BACHELORS:            )       CONTINUED
                      NUMBER   OF   TERMS          CR HOURS                          **   AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTION          OFFERED               QTR AND                                  SECT       * 1976-77  * 1976-77 (THOUS$)
                       76-77 77-78 78-79           SEMESTER    MODE OF OPER       NO.   SIZE       * NO.  FREQ* ON AND OFF-CAMPUS

ECONOMETRIC SIMULATION  0-   0     0     0          Q1-2     0  L-   0 P-   0   1-10     2          1- 50   4         IN-DPT       3
 APPLICATIONS           1-   1     1     1          Q3-4     0  R-   5 D-   0  11-20     1         51-100   1        OUT-DPT       0
                        2-   5     5     5          Q >5     0  T-   0 S-   1  21-30     3        101-150   0
                        3-   0     0     0          S1-2     0  A-   0 C-   0  31-40     0        151-200   1
                        4-   0     0     0          S3-4     5  E-   0           41-50     0           >200   0
                                                    S >5     0  I-   0            > 50     0         TOTAL  338       TOTAL         3

INSTRUCTIONAL DESIGN    0-   0     0     0          Q1-2     0  L-   0 P-   0   1-10     3          1- 50   3         IN-DPT       0
                        1-   3     3     3          Q3-4     3  R-   3 D-   0  11-20     0         51-100   0        OUT-DPT       0
                        2-   0     0     0          Q >5     0  T-   0 S-   0  21-30     0        101-150   0
                        3-   0     0     0          S1-2     0  A-   0 C-   0  31-40     0        151-200   0
                        4-   0     0     0          S3-4     0  E-   0           41-50     0           >200   0
                                                    S >5     0  I-   0            > 50     0         TOTAL   16       TOTAL         0

COMPUTER BASED          0-   0     3     3          Q1-2     0  L-   0 P-   0   1-10     3          1- 50   3         IN-DPT       0
INSTRUCTION             1-   3     0     0          Q3-4     1  R-   1 D-   0  11-20     0         51-100   0        OUT-DPT       0
                        2-   0     0     0          Q >5     0  T-   0 S-   2  21-30     0        101-150   0
                        3-   0     0     0          S1-2     1  A-   0 C-   0  31-40     0        151-200   0
                        4-   0     0     0          S3-4     1  E-   0           41-50     0           >200   0
                                                    S >5     0  I-   0            > 50     0         TOTAL   17       TOTAL         0

OTHER                   0-  13    16    16          Q1-2     9  L-  19 P-   2   1-10    50          1- 50  79         IN-DPT      18
                        1-  47    42    44          Q3-4    10  R-  37 D-   0  11-20    22         51-100   2        OUT-DPT       2
                        2-  12    12    12          Q >5     3  T-   1 S-   4  21-30     7        101-150   4
                        3-  10    12    10          S1-2    12  A-   1 C-   0  31-40     5        151-200   0
                        4-   5     5     5          S3-4    35  E-   1           41-50     2           >200   2
                                                    S >5     0  I-  22            > 50     1         TOTAL 2841       TOTAL        20

DESCRIPTION NOT CODED   0-   4     6     6          Q1-2     0  L-  43 P-   0   1-10    30          1- 50  37         IN-DPT      13
                        1-  33    32    33          Q3-4    16  R-   4 D-   0  11-20     3         51-100   6        OUT-DPT      13
                        2-   3     4     3          Q >5     6  T-   0 S-   1  21-30     9        101-150   1
                        3-   8     6     6          S1-2     7  A-   0 C-   1  31-40     3        151-200   5
                        4-   1     1     1          S3-4    18  E-   0           41-50     2           >200   0
                                                    S >5     0  I-   0            > 50     2         TOTAL 2012       TOTAL        26
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INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATICN FOR 1976-77
              CCNCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSCURI-ROLLA                       PAGE X-28
                       UNDER A GRANT FROM THE NATIONAL SCIENCE FCUNDATION

                                        SUMMARY BY CCURSE TYPE

   GROUP (          MASTERS:                 )
                     NUMBER  OF  TERMS           CR HCURS                          **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTION       OFFERED                QTR AND                                SECT      * 1976-77  * 1976-77 (THOUS$)
                      76-77 77-78 78-79          SEMESTER   MCDE OF OPER     NO.        SIZE      * NO.  FREQ* ON AND OFF-CAMPUS

COMPUTER APPRECIATION  0-   7     6     2        Q1-2     0  L-  29 P-   0   1-10      14         1- 50   40        IN-DPT    41
                       1-  24    23    27        Q3-4     7  R-  26 D-   0  11-20      10        51-100   16       OUT-DPT    10
                       2-  19    18    17        Q >5     0  T-   1 S-   2  21-30      33       101-150    2
                       3-  17    19    19        S1-2     8  A-   5 C-   0  31-40       7       151-200    1
                       4-   6     7     8        S3-4    45  E-   8          41-50       3          >200   15
                                                 S >5     0  I-   3           > 50       7         TOTAL 9553       TOTAL     51

PROBLEM SOLVING COURSE 0-   3     0     1        Q1-2     0  L-  16 P-   0   1-10      12         1- 50   29        IN-DPT     0
 IN THE HUMANITIES     1-  24    18    17        Q3-4     1  R-   9 D-   0  11-20      15        51-100   10       OUT-DPT    27
                       2-  14    21    22        Q >5     0  T-   0 S-   5  21-30      11       101-150    3
                       3-   2     3     2        S1-2     3  A-   6 C-   0  31-40       3       151-200    0
                       4-   0     1     1        S3-4    35  E-   5          41-50       2          >200    1
                                                 S >5     1  I-   2           > 50       0         TOTAL 1891       TOTAL     27

INTRODUCTORY COURSE IN 0-  26    12    15        Q1-2    22  L-  84 P-   5   1-10      52         1- 50  187        IN-DPT   154
 SOME COMPILER LANGUAGE 1- 103  112   110        Q3-4    51  R- 239 D-   0  11-20      91        51-100   55       OUT-DPT   196
 SUCH AS FORTRAN, PL/1, 2- 112  113   108        Q >5    13  T-   0 S-   0  21-30     124       101-150   47
 BASIC, ALGOL          3-  80    86    87        S1-2    44  A-   7 C-   0  31-40      60       151-200   27
                       4-  38    35    37        S3-4   191  E-  25          41-50      20          >200   45
                                                 S >5     1  I-   1           > 50      14         TOTAL 39200      TOTAL    350

INTRODUCTORY COURSE IN A 0- 11     9     6       Q1-2     5  L-  32 P-   2   1-10      36         1- 50  110        IN-DPT    91
 LANGUAGE SUCH AS COBOL 1-  84    77    78       Q3-4    27  R- 131 D-   0  11-20      48        51-100   30       CUT-DPT    97
                       2-  47    52    50        Q >5     4  T-   0 S-   0  21-30      63       101-150   22
                       3-  32    35    38        S1-2    10  A-   5 C-   0  31-40      24       151-200   12
                       4-   9    10    11        S3-4   122  E-  13          41-50      11          >200   10
                                                 S >5     0  I-   1           > 50       2         TOTAL 13883      TOTAL    188

PROBLEM SCLVING COURSE 0-  10    14    11        Q1-2     0  L-  37 P-   2   1-10      44         1- 50  112        IN-CPT    14
 IN ENGINEERING OR     1-  91    87    91        Q3-4     7  R-  46 D-   0  11-20      46        51-100   23       OUT-DPT     9
 SCIENTIFIC APPLI-     2-  29    31    30        Q >5     2  T-   0 S-   0  21-30      35       101-150    3
 CATIONS               3-  10     8     8        S1-2    14  A-  29 C-   0  31-40       9       151-200    0
                       4-   1     1     1        S3-4    94  E-  26          41-50       2          >200    3
                                                 S >5     2  I-   1           > 50       5         TOTAL 5061       TOTAL     23

INTRODUCTORY COURSE IN 0-   7     4     5        Q1-2     3  L-  30 P-   1   1-10      14         1- 50   56        IN-DPT   133
 PROGRAMMING           1-  28    27    24        Q3-4    21  R-  83 D-   0  11-20      29        51-100   30       OUT-DPT    82
                       2-  48    50    50        Q >5     4  T-   0 S-   0  21-30      44       101-150   17
                       3-  37    39    39        S1-2     9  A-   3 C-   0  31-40      29       151-200    8
                       4-   7     7     9        S3-4    72  E-  11          41-50       9          >200   17
                                                 S >5     0  I-   0           > 50       3         TOTAL 14352      TOTAL    215

ACVANCED COURSE IN     0-  27    17    17        Q1-2     3  L-  74 P-   3   1-10      71         1- 50  195        IN-DPT    31
 PROGRAMMING           1- 114   119   120        Q3-4    29  R- 141 D-   0  11-20      82        51-100   36       OUT-DPT    79
                       2-  68    73    72        Q >5     6  T-   0 S-   2  21-30      76       101-150    5
                       3-  23    23    23        S1-2     3  A-   3 C-   0  31-40       8       151-200    2
                       4-   6     6     6        S3-4   156  E-   9          41-50       1          >200    0
                                                 S >5     0  I-   6           > 50       0         TOTAL 6900       TOTAL    110

FIRST COURSE IN COMPUTER 0-  2     4     3       Q1-2     0  L-  16 P-   0   1-10      12         1- 50   30        IN-CPT    25
 DESIGN                1-  22    21    22        Q3-4     6  R-  22 D-   0  11-20      13        51-100    6       OUT-DPT    13
                       2-   9     9     9        Q >5     4  T-   0 S-   0  21-30      10       101-150    4
                       3-   7     6     6        S1-2     3  A-   0 C-   0  31-40       3       151-200    1
                       4-   3     3     3        S3-4    23  E-   3          41-50       4          >200    2
                                                 S >5     0  I-   2           > 50       1         TOTAL 2320       TOTAL     38

ADVANCED COURSE IN COM- 0-  8     4     4        Q1-2     0  L-  14 P-   0   1-10      15         1- 50   29        IN-DPT    15
 PUTER DESIGN (COMPUTER 1- 12    16    16        Q3-4    16  R-  18 D-   0  11-20      11        51-100    2       OUT-DPT     5
 ARCHITECTURE)         2-   7     7     7        Q >5     1  T-   0 S-   0  21-30       5       101-150    1
                       3-   5     5     5        S1-2     0  A-   0 C-   0  31-40       1       151-200    0
                       4-   0     0     0        S3-4    14  E-   0          41-50       0          >200    0
                                                 S >5     0  I-   0           > 50       0         TOTAL  671       TOTAL     20

PROGRAMMING LANGUAGES  0-  23    13    12        Q1-2     0  L-  38 P-   1   1-10      48         1- 50   99        IN-DPT    16
 (STRUCTURE, ETC.)     1-  70    75    76        Q3-4    13  R-  58 D-   0  11-20      32        51-100    8       CUT-DPT     6
                       2-  10    13    15        Q >5     4  T-   0 S-   2  21-30      22       101-150    2
                       3-   5     5     3        S1-2     1  A-   0 C-   2  31-40       6       151-200    0
                       4-   1     3     3        S3-4    73  E-   2          41-50       1          >200    0
                                                 S >5     0  I-   6           > 50       0         TOTAL 2189       TOTAL     23

OPERATING SYSTEMS      0-  27    15    14        Q1-2     0  L-  47 P-   2   1-10      49         1- 50  115        IN-DPT    43
 (SYSTEMS PROGRAMMING, 1-  73    82    80        Q3-4    31  R-  72 D-   0  11-20      40        51-100    7       OUT-DPT    34
  ETC.)                2-  17    19    21        Q 35     8  T-   0 S-   0  21-30      27       101-150    6
                       3-  10    11    12        S1-2     5  A-   0 C-   0  31-40       9       151-200    0
                       4-   1     1     1        S3-4    72  E-   5          41-50       2          >200    0
                                                 S >5     0  I-   2           > 50       1         TOTAL 2873       TOTAL     77

DATA STRUCTURES        0-  20    10     9        Q1-2     1  L-  39 P-   0   1-10      33         1- 50   78        IN-DPT     6
                       1-  53    59    58        Q3-4    16  R-  49 D-   0  11-20      34        51-100   10       OUT-DPT    18
                       2-  11    16    19        Q >5     5  T-   0 S-   0  21-30      20       101-150    4
                       3-   5     4     3        S1-2     1  A-   2 C-   0  31-40       3       151-200    0
                       4-   3     3     3        S3-4    60  E-   2          41-50       1          >200    0
                                                 S >5     0  I-   0           > 50       1         TOTAL 2309       TOTAL     24
                                                 SUMMARY BY COURSE TYPE
     GROUP (          MASTERS;              )     CONTINUED
                          NUMBER  OF  TERMS           CR HOURS                            **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTION           OFFERED                 QTR AND                                  SECT      * 1976-77  * 1976-77 (THOUS$)
                          76-77 77-78 78-79           SEMESTER    MODE OF OPER       NO.   SIZE      * NO.  FREQ* ON AND OFF-CAMPUS

 AUTOMATA THEORY           0-   6     4     4          Q1-2    0  L- 17 P-   0   1-10    13         1- 50   19       IN-DPT      1
                           1-  10    12    12          Q3-4    3  R-  5 D-   0  11-20     2        51-100    3      OUT-DPT      0
                           2-   6     6     6          Q >5    1  T-  0 S-   0  21-30     4       101-150    0
                           3-   0     0     0          S1-2    0  A-  0 C-   0  31-40     1       151-200    0
                           4-   0     0     0          S3-4   17  E-  0         41-50     2          >200    0
                                                       S >5    0  I-  0          > 50     0         TOTAL  459      TOTAL        1

 SIMULATION APPLICATIONS   0-  10     1     5          Q1-2    0  L- 20 P-   1   1-10    19         1- 50   44       IN-DPT      3
  (NON-ECONOMETRIC)        1-  30    38    33          Q3-4    8  R- 14 D-   0  11-20    15        51-100    1      OUT-DPT      2
                           2-   6     7     8          Q >5    1  T-  0 S-   3  21-30     8       101-150    1
                           3-   1     1     1          S1-2    2  A-  4 C-   0  31-40     3       151-200    0
                           4-   0     0     0          S3-4   33  E-  5         41-50     2          >200    1
                                                       S >5    0  I-  0          > 50     0         TOTAL 1201      TOTAL        5

 SIMULATION LANGUAGES      0-  10    12    13          Q1-2    0  L- 22 P-   0   1-10    25         1- 50   49       IN-DPT     12
  AND/OR TECHNIQUES        1-  35    33    31          Q3-4   16  R- 26 D-   0  11-20    13        51-100    2      OUT-DPT      1
                           2-   7     7     8          Q >5    0  T-  0 S-   1  21-30    13       101-150    1
                           3-   0     0     0          S1-2    1  A-  2 C-   0  31-40     0       151-200    0
                           4-   0     0     0          S3-4   31  E-  0         41-50     0          >200    0
                                                       S >5    0  I-  1          > 50     1         TOTAL  768      TOTAL       13

 ARTIFICIAL INTELLIGENCE   0-   6     4     0          Q1-2    0  L- 17 P-   0   1-10     9         1- 50   20       IN-DPT      0
  (HEURISTIC PROGRAMMING)  1-  11    14    18          Q3-4    4  R-  3 D-   0  11-20     9        51-100    2      OUT-DPT      4
                           2-   5     4     4          Q >5    0  T-  0 S-   0  21-30     3       101-150    0
                           3-   0     0     0          S1-2    0  A-  1 C-   0  31-40     0       151-200    0
                           4-   0     0     0          S3-4   15  E-  1         41-50     0          >200    0
                                                       S >5    0  I-  0          > 50     1         TOTAL  361      TOTAL        4

 HYBRID COMPUTERS          0-   3     3     0          Q1-2    0  L-  4 P-   0   1-10     4         1- 50    8       IN-DPT      4
                           1-   5     5     8          Q3-4    1  R-  2 D-   0  11-20     2        51-100    1      OUT-DPT      2
                           2-   1     1     1          Q >5    0  T-  0 S-   0  21-30     3       101-150    0
                           3-   0     0     0          S1-2    2  A-  3 C-   0  31-40     0       151-200    0
                           4-   0     0     0          S3-4    5  E-  0         41-50     0          >200    0
                                                       S >5    0  I-  0          > 50     0         TOTAL  141      TOTAL        6

 DISCRETE STRUCTURES       0-  11     1     6          Q1-2    2  L- 22 P-   0   1-10    14         1- 50   26       IN-DPT      0
                           1-  11    21    17          Q3-4    5  R-  5 D-   0  11-20    11        51-100    3      OUT-DPT     10
                           2-   9     9     8          Q >5    1  T-  0 S-   0  21-30     3       101-150    2
                           3-   1     1     1          S1-2    0  A-  1 C-   0  31-40     3       151-200    0
                           4-   0     0     0          S3-4   19  E-  4         41-50     0          >200    1
                                                       S >5    0  I-  0          > 50     1         TOTAL 1028      TOTAL       11

 COMPUTER ORGANIZATION     0-  10     7     3          Q1-2    0  L- 18 P-   0   1-10    19         1- 50   44       IN-DPT     14
                           1-  30    33    37          Q3-4   10  R- 23 D-   0  11-20    17        51-100    4      OUT-DPT      7
                           2-   8     8     8          Q >5    1  T-  0 S-   1  21-30    11       101-150    0
                           3-   0     0     0          S1-2    2  A-  4 C-   0  31-40     1       151-200    0
                           4-   0     0     0          S3-4   30  E-  1         41-50     0          >200    0
                                                       S >5    0  I-  1          > 50     0         TOTAL  897      TOTAL       21

 SWITCHING THEORY          0-   4     4     3          Q1-2    0  L- 11 P-   0   1-10     4         1- 50   14       IN-DPT      0
                           1-   9    10    11          Q3-4    1  R-  4 D-   0  11-20     7        51-100    2      OUT-DPT      0
                           2-   2     1     1          Q >5    0  T-  0 S-   0  21-30     4       101-150    0
                           3-   1     1     1          S1-2    0  A-  0 C-   0  31-40     1       151-200    0
                           4-   0     0     0          S3-4   13  E-  1         41-50     0          >200    0
                                                       S >5    0  I-  0          > 50     0         TOTAL  325      TOTAL        0

 SEQUENTIAL MACHINES       0-   2     1     0          Q1-2    0  L-  3 P-   0   1-10     3         1- 50    7       IN-DPT      0
                           1-   1     2     3          Q3-4    4  R-  4 D-   0  11-20     5        51-100    1      OUT-DPT      0
                           2-   2     2     2          Q >5    0  T-  0 S-   0  21-30     0       101-150    0
                           3-   2     2     2          S1-2    0  A-  1 C-   0  31-40     0       151-200    0
                           4-   1     1     1          S3-4    2  E-  0         41-50     0          >200    0
                                                       S >5    0  I-  0          > 50     0         TOTAL  216      TOTAL        0

 COMPILER CONSTRUCTION     0-  12    14     4          Q1-2    0  L- 30 P-   0   1-10    30         1- 50   57       IN-DPT     15
                           1-  36    35    43          Q3-4   12  R- 26 D-   0  11-20    14        51-100    1      OUT-DPT      4
                           2-   8     7     9          Q >5    4  T-  0 S-   0  21-30    14       101-150    0
                           3-   2     2     2          S1-2    1  A-  1 C-   0  31-40     0       151-200    0
                           4-   0     0     0          S3-4   38  E-  1         41-50     0          >200    0
                                                       S >5    0  I-  0          > 50     0         TOTAL  819      TOTAL       19

 FORMAL LANGUAGES AND      0-   5     2     3          Q1-2    0  L- 16 P-   0   1-10     9         1- 50   17       IN-DPT      5
  SYNTACTIC ANALYSIS       1-  10    13    11          Q3-4    8  R-  3 D-   0  11-20     6        51-100    2      OUT-DPT      5
                           2-   3     3     4          Q >5    0  T-  0 S-   0  21-30     4       101-150    0
                           3-   0     0     0          S1-2    0  A-  0 C-   0  31-40     0       151-200    0
                           4-   1     1     1          S3-4   11  E-  0         41-50     0          >200    0
                                                       S >5    0  I-  0          > 50     0         TOTAL  360      TOTAL       11

 INTRODUCTORY COMPUTER     0-   4     2     1          Q1-2    2  L- 18 P-   0   1-10    11         1- 50   33       IN-DPT      7
  ORGANIZATION             1-  27    28    30          Q3-4    4  R- 19 D-   0  11-20    12        51-100    5      OUT-DPT      7
                           2-   6     7     6          Q >5    2  T-  0 S-   0  21-30    13       101-150    0
                           3-   3     3     3          S1-2    1  A-  2 C-   0  31-40     4       151-200    1
                           4-   0     0     0          S3-4   26  E-  2         41-50     0          >200    2
                                                       S >5    0  I-  0          > 50     1         TOTAL 1923      TOTAL       14
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SUMMARY BY COURSE TYPE
CONTINUED

GROUP (MASTERS: 1

COURSE DESCRIPTION	NUMBER OF TERMS OFFERED	76-77	77-78	78-79	CR HOURS QTR AND SEMESTER		MODE OF OPER				** AVERAGE ** SECT NO.	SIZE	*ENROLLMENT* * 1976-77 * NO.	FREQ*	COST COMPUTER SVCS * 1976-77 (THOUS$) ON AND OFF-CAMPUS	
ADVANCED CCMPUTER ORGANIZATION	0-	5	3	2	Q1-2	0	L-	12	P-	0	1-10	8	1- 50	19	IN-DPT	16
	1-	10	12	13	Q3-4	5	R-	7	D-	0	11-20	6	51-100	1	OUT-DPT	8
	2-	6	6	6	Q >5	0	T-	0	S-	0	21-30	5	101-150	1		
	3-	0	0	0	S1-2	2	A-	1	C-	0	31-40	1	151-200	0		
	4-	0	0	0	S3-4	13	E-	1			41-50	0	>200	0		
					S >5	0	I-	0			> 50	1	TOTAL	487	TOTAL	24
INFORMATION STORAGE AND RETRIEVAL	0-	8	7	2	Q1-2	0	L-	9	P-	0	1-10	11	1- 50	19	IN-DPT	2
	1-	10	11	14	Q3-4	4	R-	12	D-	0	11-20	4	51-100	1	CUT-CPT	8
	2-	2	1	3	Q >5	1	T-	0	S-	0	21-30	3	101-150	1		
	3-	1	2	2	S1-2	2	A-	1	C-	0	31-40	1	151-200	0		
	4-	1	1	1	S3-4	13	E-	0			41-50	1	>200	1		
					S >5	0	I-	0			> 50	2	TOTAL	1087	TOTAL	10
COMPUTER GRAPHICS	0-	4	4	3	Q1-2	1	L-	10	P-	0	1-10	11	1- 50	20	IN-CPT	0
	1-	11	11	12	Q3-4	4	R-	9	D-	0	11-20	1	51-100	0	OUT-DPT	0
	2-	5	5	5	Q >5	0	T-	0	S-	0	21-30	6	101-150	0		
	3-	0	0	0	S1-2	0	A-	1	C-	0	31-40	2	151-20C	0		
	4-	0	0	0	S3-4	14	E-	0			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TCTAL	294	TOTAL	0
COMPUTABILITY	0-	4	3	2	Q1-2	0	L-	14	P-	0	1-10	8	1- 50	16	IN-DPT	0
	1-	8	9	10	Q3-4	5	R-	2	D-	0	11-20	5	51-100	0	OUT-DPT	0
	2-	4	4	4	Q >5	0	T-	0	S-	0	21-30	3	101-150	0		
	3-	0	0	0	S1-2	0	A-	0	C-	0	31-40	0	151-200	0		
	4-	0	0	0	S3-4	11	E-	0			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	211	TOTAL	0
INTRODUCTORY NUMERICAL ANALYSIS (OR METHODS)	0-	19	22	13	Q1-2	3	L-	58	P-	0	1-10	54	1- 50	119	IN-DPT	5
	1-	87	81	95	Q3-4	18	R-	60	D-	0	11-20	51	51-100	5	CUT-DPT	18
	2-	17	20	15	Q >5	3	T-	0	S-	1	21-30	23	101-150	6		
	3-	8	7	8	S1-2	3	A-	7	C-	0	31-40	2	151-200	0		
	4-	1	2	1	S3-4	88	E-	5			41-50	0	>200	2		
					S >5	0	I-	1			> 50	2	TOTAL	4228	TOTAL	23
ADVANCED NUMERICAL ANALYSIS	0-	12	9	8	Q1-2	0	L-	42	P-	0	1-10	37	1- 50	63	IN-DPT	1
	1-	44	47	48	Q3-4	20	R-	19	D-	0	11-20	16	51-100	1	OUT-DPT	6
	2-	7	7	7	Q >5	1	T-	0	S-	1	21-30	11	101-150	0		
	3-	1	1	1	S1-2	3	A-	1	C-	0	31-40	0	151-200	0		
	4-	0	0	0	S3-4	32	E-	1			41-50	0	>20C	0		
					S >5	1	I-	0			> 50	0	TOTAL	794	TOTAL	7
INTRODUCTORY OPERATIONS RESEARCH	0-	16	10	6	Q1-2	0	L-	40	P-	0	1-10	20	1- 50	52	IN-DPT	5
	1-	34	39	44	Q3-4	6	R-	19	D-	0	11-20	22	51-100	6	OUT-DPT	2
	2-	8	9	8	Q >5	3	T-	0	S-	0	21-30	19	101-150	2		
	3-	4	3	3	S1-2	0	A-	3	C-	0	31-40	3	151-200	1		
	4-	2	3	3	S3-4	52	E-	2			41-50	0	>200	3		
					S >5	0	I-	0			> 50	0	TOTAL	2313	TOTAL	7
ADVANCED OPERATIONS RESEARCH	0-	7	2	5	Q1-2	0	L-	16	P-	0	1-10	12	1- 50	26	IN-DPT	0
	1-	18	23	20	Q3-4	8	R-	6	D-	0	11-20	11	51-100	2	OUT-DPT	0
	2-	3	3	3	Q >5	2	T-	0	S-	0	21-30	5	101-150	0		
	3-	0	0	0	S1-2	0	A-	3	C-	0	31-40	0	151-200	0		
	4-	0	0	0	S3-4	17	E-	2			41-50	0	>200	0		
					S >5	0	I-	1			> 50	0	TOTAL	407	TOTAL	0
DATA COMMUNICATIONS	0-	8	7	4	Q1-2	1	L-	12	P-	0	1-10	10	1- 50	20	IN-CPT	6
	1-	13	14	17	Q3-4	6	R-	8	D-	0	11-20	7	51-100	5	CUT-DPT	5
	2-	4	4	4	Q >5	1	T-	0	S-	1	21-30	5	101-150	0		
	3-	0	0	0	S1-2	1	A-	1	C-	0	31-40	2	151-200	0		
	4-	0	0	0	S3-4	15	E-	2			41-50	1	>20C	0		
					S >5	0	I-	1			> 50	0	TOTAL	622	TOTAL	11
PROCESS CONTROL	0-	1	0	0	Q1-2	0	L-	3	P-	0	1-10	1	1- 50	5	IN-DPT	501
	1-	4	4	4	Q3-4	3	R-	2	D-	0	11-20	2	51-10C	0	OUT-DPT	0
	2-	1	2	1	Q >5	0	T-	0	S-	0	21-30	2	101-150	0		
	3-	0	0	1	S1-2	1	A-	0	C-	1	31-40	0	151-20C	0		
	4-	0	0	0	S3-4	2	E-	0			41-50	0	>200	1		
					S >5	0	I-	0			> 50	1	TOTAL	8085	TOTAL	501
DATA PREPARATION (KEY PUNCH, VERIFIER, CATA ENTRY,...)	0-	0	1	1	Q1-2	1	L-	0	P-	0	1-10	1	1- 50	5	IN-DPT	0
	1-	3	2	2	Q3-4	1	R-	7	D-	0	11-20	1	51-100	2	CUT-DPT	1
	2-	3	3	3	Q >5	0	T-	0	S-	0	21-30	5	101-150	1		
	3-	2	1	2	S1-2	3	A-	0	C-	0	31-40	1	151-200	0		
	4-	0	1	0	S3-4	3	E-	1			41-50	0	>20C	0		
					S >5	0	I-	0			> 50	0	TOTAL	426	TOTAL	2
UNIT RECORD (EAM)	0-	0	0	0	Q1-2	0	L-	0	P-	0	1-10	1	1- 50	1	IN-DPT	0
	1-	2	1	1	Q3-4	1	R-	3	D-	0	11-20	0	51-100	2	CUT-DPT	0
	2-	0	1	1	Q >5	0	T-	0	S-	0	21-30	0	101-150	1		
	3-	2	2	2	S1-2	0	A-	0	C-	0	31-40	3	151-200	0		
	4-	0	0	0	S3-4	3	E-	1			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	282	TOTAL	0

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                                              SUMMARY BY COURSE TYPE
   GROUP (        MASTERS:             )      CONTINUED
                      NUMBER  OF  TERMS           CR HOURS                                 **  AVERAGE **  *ENROLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTION          OFFERED              QTR AND                                      SECT       * 1976-77   * 1976-77 (THOUS$)
                       76-77 77-78 78-79          SEMESTER    MODE OF OPER          NO.     SIZE       * NO.   FREQ* ON AND OFF-CAMPUS

 INTRODUCTORY COURSE    0-   6     3     4        Q1-2     1  L-  30 P-   0   1-10    14         1- 50   34         IN-DPT     33
  IN DATA PROCESSING    1-  22    24    24        Q3-4    11  R-  49 D-   0  11-20    14        51-100   21        OUT-DPT     89
                        2-  24    21    21        Q >5     5  T-   0 S-   1  21-30    33       101-150    6
                        3-  32    35    33        S1-2     6  A-   8 C-   0  31-40    23       151-200    6
                        4-  16    17    18        S3-4    68  E-  14         41-50    10          >200   35
                                                  S >5     0  I-   0          > 50     8         TOTAL 22176        TOTAL      121

 ADVANCED COURSE IN DATA 0-  6     1     5        Q1-2     0  L-   8 P-   1   1-10    10         1- 50   21         IN-DPT      1
  PROCESSING            1-  13    19    15        Q3-4     1  R-   9 D-   0  11-20     5        51-100    2        OUT-DPT      0
                        2-   5     4     4        Q >5     2  T-   0 S-   1  21-30     8       101-150    0
                        3-   0     0     0        S1-2     4  A-   1 C-   0  31-40     1       151-200    0
                        4-   0     0     0        S3-4    15  E-   1         41-50     0          >200    1
                                                  S >5     0  I-   3          > 50     0         TOTAL   846        TOTAL        1

 PROBLEM SOLVING COURSE 0-   4     4     5        Q1-2     2  L-  35 P-   1   1-10    24         1- 50   59         IN-DPT      5
  IN BUSINESS APPLI-    1-  39    37    36        Q3-4     6  R-  16 D-   0  11-20    28        51-100   11        OUT-DPT     11
  LATIONS               2-  26    27    27        Q >5     2  T-   0 S-   3  21-30    20       101-150    2
                        3-   8    10    10        S1-2     0  A-  12 C-   0  31-40    10       151-200    3
                        4-   6     5     5        S3-4    66  E-   5         41-50     1          >200    8
                                                  S >5     1  I-  11          > 50     0         TOTAL  6737        TOTAL       16

 ADVANCED BUSINESS APPLI- 0-  3     3     0       Q1-2     0  L-  19 P-   2   1-10    14         1- 50   41         IN-DPT      6
  CATIONS (MARKETING,   1-  31    32    35        Q3-4     0  R-  15 D-   0  11-20    21        51-100    4        OUT-DPT     10
  FINANCE, PRODUCTION,  2-   7     7     7        Q >5     5  T-   0 S-   1  21-30     9       101-150    0
  ETC.)                 3-   7     6     6        S1-2     1  A-   4 C-   0  31-40     3       151-200    3
                        4-   0     0     0        S3-4    41  E-   1         41-50     1          >200    0
                                                  S >5     0  I-   6          > 50     0         TOTAL  1582        TOTAL       16

 INTRODUCTORY SYSTEMS   0-  16     4     6        Q1-2     0  L-  23 P-   0   1-10    20         1- 50   49         IN-DPT      9
  ANALYSIS (BUSINESS)   1-  28    37    34        Q3-4    14  R-  25 D-   0  11-20    18        51-100    6        OUT-DPT      4
                        2-   8    12    13        Q >5     2  T-   0 S-   1  21-30    17       101-150    4
                        3-   7     5     5        S1-2     0  A-   8 C-   0  31-40     4       151-200    1
                        4-   2     3     3        S3-4    44  E-   2         41-50     2          >200    1
                                                  S >5     1  I-   2          > 50     0         TOTAL  2482        TOTAL       13

 LARGE SCALE INFORMATION 0-  2     0     1        Q1-2     0  L-   2 P-   0   1-10     3         1- 50    7         IN-DPT      0
  PROCESSING SYSTEMS    1-   4     6     5        Q3-4     1  R-   4 D-   0  11-20     1        51-100    0        OUT-DPT      0
                        2-   0     0     0        Q >5     1  T-   0 S-   0  21-30     2       101-150    0
                        3-   1     1     1        S1-2     0  A-   0 C-   0  31-40     1       151-200    0
                        4-   0     0     0        S3-4     5  E-   1         41-50     0          >200    0
                                                  S >5     0  I-   0          > 50     0         TOTAL   120        TOTAL        0

 FILE ORGANIZATION      0-   2     0     1        Q1-2     0  L-   4 P-   0   1-10     5         1- 50   16         IN-DPT      5
                        1-   9    11    10        Q3-4     5  R-  11 D-   0  11-20     8        51-100    2        OUT-DPT     17
                        2-   8     7     7        Q >5     0  T-   0 S-   0  21-30     5       101-150    1
                        3-   0     1     1        S1-2     0  A-   3 C-   0  31-40     1       151-200    0
                        4-   0     0     0        S3-4    11  E-   1         41-50     0          >200    0
                                                  S >5     0  I-   0          > 50     0         TOTAL   586        TOTAL       22

 DATA BASE MANAGEMENT   0-  14     9     0        Q1-2     1  L-  21 P-   1   1-10    13         1- 50   34         IN-DPT      3
                        1-  19    25    32        Q3-4    13  R-  13 D-   0  11-20    10        51-100    3        OUT-DPT      1
                        2-   4     3     5        Q >5     2  T-   0 S-   0  21-30    12       101-150    2
                        3-   1     1     1        S1-2     1  A-   2 C-   0  31-40     2       151-200    0
                        4-   1     1     1        S3-4    20  E-   2         41-50     1          >200    0
                                                  S >5     0  I-   0          > 50     1         TOTAL   892        TOTAL        4

 INFORMATION SYSTEMS    0-  10     4     9        Q1-2     1  L-  17 P-   1   1-10    11         1- 50   35         IN-DPT      2
  DESIGN (INTRODUCTORY) 1-  25    31    26        Q3-4     7  R-  21 D-   0  11-20    19        51-100    7        OUT-DPT      4
                        2-   5     5     5        Q >5     1  T-   0 S-   0  21-30     6       101-150    1
                        3-   3     3     3        S1-2     2  A-   1 C-   0  31-40     6       151-200    0
                        4-   0     0     0        S3-4    28  E-   3         41-50     0          >200    0
                                                  S >5     0  I-   0          > 50     1         TOTAL  1167        TOTAL        6

 INFORMATION SYSTEMS    0-   8     3     3        Q1-2     1  L-  12 P-   1   1-10    17         1- 50   27         IN-DPT      0
  DESIGN (ADVANCED)     1-  16    20    20        Q3-4     7  R-  10 D-   0  11-20     7        51-100    3        OUT-DPT      6
                        2-   3     4     4        Q >5     1  T-   0 S-   0  21-30     6       101-150    1
                        3-   4     3     3        S1-2     0  A-   1 C-   1  31-40     1       151-200    0
                        4-   0     1     1        S3-4    20  E-   3         41-50     0          >200    0
                                                  S >5     0  I-   3          > 50     0         TOTAL   632        TOTAL        6

 MANAGEMENT INFORMATION 0-   7     3     4        Q1-2     0  L-  12 P-   0   1-10     7         1- 50   29         IN-DPT      8
  SYSTEMS               1-  21    25    23        Q3-4     6  R-   9 D-   0  11-20    11        51-100    4        OUT-DPT      6
                        2-   3     2     3        Q >5     0  T-   0 S-   3  21-30    12       101-150    0
                        3-   1     2     2        S1-2     1  A-   7 C-   0  31-40     3       151-200    0
                        4-   1     1     1        S3-4    24  E-   2         41-50     0          >200    0
                                                  S >5     0  I-   0          > 50     0         TOTAL   775        TOTAL       14

 MANAGEMENT OF COMPUTER 0-   2     1     0        Q1-2     0  L-   8 P-   1   1-10     5         1- 50   13         IN-DPT      2
  CENTERS OF INFORMATION 1- 11    11    12        Q3-4     3  R-   4 D-   0  11-20     6        51-100    4        OUT-DPT      0
   PROCESSING DEPARTMENTS 2- 3     3     3        Q >5     0  T-   0 S-   1  21-30     4       101-150    0
                        3-   1     2     2        S1-2     0  A-   1 C-   0  31-40     1       151-200    0
                        4-   0     0     0        S3-4    12  E-   1         41-50     1          >200    0
                                                  S >5     0  I-   1          > 50     0         TOTAL   422        TOTAL        2
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                                                 SUMMARY BY COURSE TYPE
   GROUP (          MASTERS:               )     CONTINUED
                           NUMBER  OF  TERMS       CR HOURS                        **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
COURSE DESCRIPTION             OFFERED             QTR AND                              SECT      * 1976-77  * 1976-77 (THOUS$)
                          76-77 77-78 78-79        SEMESTER    MODE OF OPER     NO.    SIZE      * NO.   FREQ* ON AND OFF-CAMPUS

COMPUTERS AND ACCOUNTING 0-   1     3     3        Q1-2    0  L-   5 P-   0   1-10     1         1- 50   10      IN-DPT      2
 (INCLUDING AUDITING)    1-   7     4     5        Q3-4    1  R-   2 D-   0  11-20     5        51-100    1      OUT-DPT     0
                         2-   2     3     2        Q >5    1  T-   0 S-   0  21-30     4       101-150    0
                         3-   1     0     0        S1-2    0  A-   1 C-   0  31-40     1       151-200    0
                         4-   0     1     1        S3-4    8  E-   2         41-50     0          >200    0
                                                   S >5    0  I-   1          > 50     0        TOTAL   291      TOTAL       2

ECONOMETRIC SIMULATION   0-   1     1     0        Q1-2    0  L-   2 P-   0   1-10     5         1- 50    9      IN-DPT      0
 APPLICATIONS            1-   6     6     7        Q3-4    2  R-   3 D-   0  11-20     2        51-100    0      OUT-DPT     0
                         2-   2     2     2        Q >5    0  T-   0 S-   1  21-30     2       101-150    0
                         3-   0     0     0        S1-2    0  A-   2 C-   0  31-40     0       151-200    0
                         4-   0     0     0        S3-4    7  E-   1         41-50     0          >200    0
                                                   S >5    0  I-   0          > 50     0        TOTAL   133      TOTAL       0

INSTRUCTIONAL DESIGN     0-   0     0     0        Q1-2    0  L-   0 P-   1   1-10     1         1- 50    1      IN-DPT      0
                         1-   0     0     0        Q3-4    0  R-   0 D-   0  11-20     0        51-100    0      OUT-DPT     0
                         2-   1     1     1        Q >5    0  T-   0 S-   0  21-30     0       101-150    0
                         3-   0     0     0        S1-2    0  A-   0 C-   0  31-40     0       151-200    0
                         4-   0     0     0        S3-4    1  E-   0         41-50     0          >200    0
                                                   S >5    0  I-   0          > 50     0        TOTAL     1      TOTAL       0

INSTRUCTIONAL SYSTEMS    0-   2     1     2        Q1-2    0  L-   3 P-   0   1-10     6         1- 50    7      IN-DPT      2
                         1-   2     3     2        Q3-4    5  R-   4 D-   0  11-20     0        51-100    0      OUT-DPT     2
                         2-   3     3     3        Q >5    0  T-   0 S-   0  21-30     1       101-150    0
                         3-   0     0     0        S1-2    0  A-   0 C-   0  31-40     0       151-200    0
                         4-   0     0     0        S3-4    2  E-   0         41-50     0          >200    0
                                                   S >5    0  I-   0          > 50     0        TOTAL    45      TOTAL       4

COMPUTER BASED           0-   1     3     1        Q1-2    0  L-   8 P-   0   1-10     8         1- 50   17      IN-DPT      5
INSTRUCTION              1-  13    11    13        Q3-4    7  R-   9 D-   0  11-20     7        51-100    2      OUT-DPT     4
                         2-   4     3     3        Q >5    1  T-   0 S-   0  21-30     4       101-150    0
                         3-   1     2     2        S1-2    3  A-   0 C-   0  31-40     0       151-200    0
                         4-   0     0     0        S3-4    7  E-   2         41-50     0          >200    0
                                                   S >5    0  I-   0          > 50     0        TOTAL   317      TOTAL       9

OTHER                    0-  44    28    22        Q1-2   39  L-  88 P-  14   1-10   184         1- 50  284      IN-DPT     44
                         1- 132   145   150        Q3-4   31  R-  82 D-   2  11-20    64        51-100    9      OUT-DPT    41
                         2-  66    66    65        Q >5   19  T-   0 S-  19  21-30    46       101-150    4
                         3-  26    29    30        S1-2   30  A-   4 C-   1  31-40     7       151-200    2
                         4-  34    34    35        S3-4  157  E-   6         41-50     1          >200    3
                                                   S >5    5  I-  86          > 50     0        TOTAL  6202      TOTAL      85

DESCRIPTION NOT CODED    0-  11    43    51        Q1-2   13  L- 106 P-   1   1-10    55         1- 50  103      IN-DPT     23
                         1-  67    39    35        Q3-4    8  R-  31 D-   0  11-20    48        51-100   17      OUT-DPT     5
                         2-  50    50    44        Q >5   20  T-   0 S-   2  21-30    24       101-150    9
                         3-   1     0     3        S1-2   12  A-   0 C-   0  31-40     9       151-200    5
                         4-  12     9     8        S3-4   85  E-   0         41-50     1          >200    7
                                                   S >5    2  I-   1          > 50     4        TOTAL  8010      TOTAL      28
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                                                  SUMMARY BY COURSE TYPE
GROUP I          DOCTCRATE:            )
                            NUMBER  OF  TERMS          CR HCURS                      **  AVERAGE **  *ENRCLLMENT* COST COMPUTER SVCS
COURSE DESCRIPTICN               OFFERED               QTR AND                               SECT    * 1976-77  * 1976-77 (THOUS$)
                           76-77 77-78 78-79           SEMESTER   MCDE OF OPER        NO.    SIZE    * NO.   FREQ* ON AND OFF-CAMPUS

COMPUTER APPRECIATION      0-   7     8     9          Q1-2     4  L-  37 P-   0   1-10    16      1- 50    44        IN-CPT      44
                           1-  30    34    33          Q3-4    17  R-  34 D-   0  11-20    18     51-100     9       OUT-OPT      20
                           2-  20    18    17          Q >5     4  T-   0 S-   0  21-30    14    101-150     7
                           3-  19    17    17          S1-2     6  A-   8 C-   1  31-40    17    151-200     5
                           4-   7     6     7          S3-4    49  E-   3         41-50     2       >200    18
                                                       S >5     0  I-   0          > 50    16      TOTAL 10717        TOTAL       64

PROBLEM SOLVING COURSE     0-  18    28    42          Q1-2     1  L-  28 P-   0   1-10    43      1- 50    91        IN-OPT      33
 IN THE HUMANITIES         1-  61    54    42          Q3-4    17  R-  29 C-   3  11-20    32     51-100     8       OUT-OPT      25
                           2-  19    17    16          Q >5     3  T-   0 S-   0  21-30    18    101-150     0
                           3-   7     7     5          S1-2     3  A-  23 C-  25  31-40     6    151-200     1
                           4-   3     2     3          S3-4    82  E-   0         41-50     2       >200     8
                                                       S >5     0  I-   0          > 50     7      TOTAL  4826        TOTAL       58

INTRODUCTORY COURSE IN     0-  20    21    27          Q1-2    15  L- 119 P-   5   1-10    32      1- 50   116        IN-OPT     287
 SCME COMPILER LANGUAGE    1-  79    81    77          Q3-4    63  R- 180 D-   0  11-20    56     51-100    48       OUT-OPT     740
 SUCH AS FCRTRAN, PL/1,    2-  68    68    67          Q >5     7  T-   1 S-   0  21-30    83    101-150    29
 BASIC, ALGCL              3- 101   102   103          S1-2    74  A-   6 C-   1  31-40    53    151-200    21
                           4-  52    48    46          S3-4   143  E-   7         41-50    38       >200   109
                                                       S >5     1  I-   4          > 50    61      TOTAL 77131        TOTAL     1027

INTRODUCTORY COURSE IN A   0-  10     5     5          Q1-2     2  L-  44 P-   3   1-10    18      1- 50    54        IN-OPT      46
 LANGUAGE SUCH AS COBOL    1-  38    36    37          Q3-4    31  R-  55 D-   0  11-20    20     51-100    27       OUT-OPT     152
                           2-  27    35    34          Q >5     4  T-   0 S-   0  21-30    34    101-150    13
                           3-  32    32    31          S1-2    12  A-   3 C-   0  31-40    20    151-200     6
                           4-   5     4     5          S3-4    57  E-   4         41-50     8       >200    12
                                                       S >5     0  I-   3          > 50    12      TOTAL 10167        TOTAL      199

PROBLEM SOLVING COURSE     0-  27    59    72          Q1-2    12  L-  66 P-   4   1-10    74      1- 50   179        IN-OPT     121
 IN ENGINEERING OR         1- 130   103    95          Q3-4    30  R- 100 D-  19  11-20    77     51-100    39       OUT-OPT      88
 SCIENTIFIC APPLI-         2-  56    58    51          Q >5     1  T-   0 S-   4  21-30    38    101-150     4
 CATIONS                   3-  21    16    18          S1-2    19  A-  14 C-   0  31-40    32    151-200     5
                           4-   4     2     2          S3-4   154  E-   5         41-50     7       >200    11
                                                       S >5     5  I-  26          > 50    10      TOTAL 11354        TOTAL      210

INTRODUCTORY COURSE IN     0-  10    21    28          Q1-2     3  L-  61 P-   2   1-10    31      1- 50    67        IN-OPT     213
 PROGRAMMING               1-  49    38    34          Q3-4    41  R-  95 D-   0  11-20    27     51-100    26       OUT-OPT     736
                           2-  55    52    47          Q >5     5  T-   0 S-   1  21-30    45    101-150    23
                           3-  47    48    47          S1-2    16  A-   7 C-   0  31-40    28    151-200    10
                           4-  17    19    22          S3-4   108  E-  13         41-50    16       >200    54
                                                       S >5     0  I-   1          > 50    33      TOTAL 39005        TOTAL      949

ACVANCED COURSE IN         0-  21    14    19          Q1-2     2  L-  79 P-   1   1-10    49      1- 50   132        IN-OPT     138
 PROGRAMMING               1-  90    93    89          Q3-4    53  R-  93 D-   0  11-20    47     51-100    32       OUT-OPT     367
                           2-  47    50    45          Q >5     8  T-   0 S-   1  21-30    54    101-150    14
                           3-  36    34    40          S1-2     8  A-   6 C-   0  31-40    28    151-200    10
                           4-   5     8     6          S3-4   120  E-  15         41-50     8       >200    11
                                                       S >5     3  I-   4          > 50    13      TOTAL 12275        TOTAL      505

FIRST COURSE IN COMPUTER   0-   7     6     7          Q1-2     3  L-  39 P-   6   1-10     9      1- 50    38        IN-OPT       6
 DESIGN                    1-  33    32    29          Q3-4    21  R-  27 D-   0  11-20    17     51-100    17       CUT-OPT      19
                           2-  17    18    19          Q >5     5  T-   0 S-   0  21-30    14    101-150     9
                           3-  16    15    17          S1-2     3  A-   1 C-   0  31-40    17    151-200     3
                           4-   0     2     1          S3-4    42  E-   0         41-50     9       >200     7
                                                       S >5     0  I-   1          > 50     8      TOTAL  6350        TOTAL       25

ACVANCED COURSE IN COM-    0-  22    18    21          Q1-2     2  L-  71 P-   8   1-10    54      1- 50   115        IN-OPT      16
 PUTER DESIGN (COMPUTER    1-  79    83    79          Q3-4    33  R-  41 D-   0  11-20    28     51-100    12       OUT-OPT      36
 ARCHITECTURE)             2-  18    17    19          Q >5     3  T-   0 S-   7  21-30    33    101-150     2
                           3-  12    13    12          S1-2     5  A-   2 C-   0  31-40     9    151-200     3
                           4-   1     1     1          S3-4    85  E-   3         41-50     4       >200     0
                                                       S >5     1  I-   0          > 50     4      TOTAL  3668        TOTAL       52

PROGRAMMING LANGUAGES      0-  24    23    22          Q1-2     3  L- 108 P-   0   1-10    45      1- 50   112        IN-OPT     108
 (STRUCTURE, ETC.)         1-  86    85    86          Q3-4    41  R-  39 D-   0  11-20    26     51-100    29       OUT-OPT     157
                           2-  28    31    33          Q >5     6  T-   0 S-   4  21-30    39    101-150     8
                           3-  18    17    15          S1-2     2  A-   4 C-   0  31-40    16    151-200     3
                           4-   2     2     2          S3-4   105  E-   2         41-50    19       >200     6
                                                       S >5     0  I-   1          > 50    13      TOTAL  7392        TOTAL      265

OPERATING SYSTEMS          0-  49    43    30          Q1-2     7  L- 182 P-   0   1-10    91      1- 50   216        IN-OPT     184
 (SYSTEMS PROGRAMMING,     1- 153   155   166          Q3-4    83  R-  59 D-   0  11-20    70     51-100    25       CUT-OPT     158
  ETC.)                    2-  41    43    45          Q >5     8  T-   0 S-   2  21-30    45    101-150    11
                           3-  10    12    11          S1-2     4  A-   8 C-   0  31-40    27    151-200     4
                           4-   3     3     4          S3-4   149  E-   4         41-50    13       >200     0
                                                       S >5     2  I-   1          > 50    10      TOTAL  7102        TOTAL      342

DATA STRUCTURES            0-  21    21    17          Q1-2     1  L- 102 P-   0   1-10    31      1- 50   102        IN-OPT     191
                           1-  77    74    75          Q3-4    48  R-  39 D-   1  11-20    43     51-100    31       CUT-OPT     162
                           2-  37    36    37          Q >5     7  T-   0 S-   1  21-30    40    101-150     8
                           3-  15    19    21          S1-2     1  A-   5 C-   0  31-40    19    151-200     8
                           4-   2     2     2          S3-4    92  E-   4         41-50    12       >200     3
                                                       S >5     0  I-   0          > 50     7      TOTAL  7161        TOTAL      352
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                                                 SUMMARY BY COURSE TYPE
GROUP (          DOCTORATE:              )       CONTINUED
                     NUMBER  OF  TERMS             CR HOURS                          **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
                          OFFERED                  QTR AND                                   SECT     * 1976-77  * 1976-77 (THOUS$)
COURSE DESCRIPTION   76-77 77-78 78-79             SEMESTER    MODE OF OPER          NO.    SIZE     * NO.  FREQ* ON AND OFF-CAMPUS

AUTOMATA THEORY            0-  22    22    15      Q1-2   1  L-  69 P-   0   1-10   40      1- 50   71     IN-DPT     0
                           1-  43    43    51      Q3-4  26  R-   7 D-   0  11-20   24     51-100    5     OUT-DPT    8
                           2-  12    12    11      Q >5   4  T-   0 S-   2  21-30    9    101-150    2
                           3-   2     2     2      S1-2   1  A-   0 C-   0  31-40    4    151-200    1
                           4-   0     0     0      S3-4  46  E-   1         41-50    1       >200    0
                                                   S >5   0  I-   0          > 50    1      TOTAL 1557     TOTAL      8

SIMULATION APPLICATIONS    0-  10    11     9      Q1-2   1  L-  34 P-   0   1-10   28      1- 50   59     IN-DPT     6
 (NON-ECONOMETRIC)         1-  49    46    48      Q3-4  21  R-  24 D-   0  11-20   24     51-100    4     OUT-DPT   66
                           2-   4     6     6      Q >5   3  T-   0 S-   1  21-30    7    101-150    0
                           3-   0     0     0      S1-2   1  A-   2 C-   0  31-40    3    151-200    0
                           4-   0     0     0      S3-4  33  E-   1         41-50    1       >200    0
                                                   S >5   1  I-   1          > 50    0      TOTAL 1018     TOTAL     72

SIMULATION LANGUAGES       0-  11    12     6      Q1-2   1  L-  43 P-   0   1-10   24      1- 50   64     IN-DPT    16
 AND/OR TECHNIQUES         1-  48    49    54      Q3-4  20  R-  22 D-   0  11-20   23     51-100    6     OUT-DPT   52
                           2-  11     8    10      Q >5   2  T-   0 S-   2  21-30   15    101-150    1
                           3-   1     2     1      S1-2   3  A-   3 C-   0  31-40    6    151-200    0
                           4-   0     0     0      S3-4  43  E-   1         41-50    0       >200    0
                                                   S >5   0  I-   0          > 50    3      TOTAL 1625     TOTAL     67

ARTIFICIAL INTELLIGENCE    0-  35    36    29      Q1-2   5  L-  99 P-   2   1-10   78      1- 50  135     IN-DPT   112
 (HEURISTIC PROGRAMMING)   1-  93    91    98      Q3-4  43  R-  18 D-   0  11-20   38     51-100    4     OUT-DPT   42
                           2-   9    11    11      Q >5   5  T-   0 S-  15  21-30   17    101-150    0
                           3-   2     1     1      S1-2   3  A-   3 C-   0  31-40    5    151-200    1
                           4-   1     1     1      S3-4  83  E-   1         41-50    0       >200    0
                                                   S >5   0  I-   2          > 50    2      TOTAL 1975     TOTAL    154

HYBRID COMPUTERS           0-   5     3     2      Q1-2   0  L-   2 P-   0   1-10    7      1- 50   15     IN-DPT     1
                           1-   7     9    10      Q3-4   7  R-  12 D-   0  11-20    8     51-100    1     OUT-DPT    0
                           2-   2     2     2      Q >5   1  T-   0 S-   0  21-30    1    101-150    0
                           3-   1     1     1      S1-2   0  A-   0 C-   0  31-40    0    151-200    0
                           4-   1     1     1      S3-4   8  E-   2         41-50    0       >200    0
                                                   S >5   0  I-   0          > 50    0      TOTAL  211     TOTAL      1

DISCRETE STRUCTURES        0-  13     9     8      Q1-2   1  L-  63 P-   0   1-10   17      1- 50   50     IN-DPT     2
                           1-  35    40    39      Q3-4  19  R-   6 D-   0  11-20   20     51-100   15     OUT-DPT   18
                           2-  15    14    15      Q >5   3  T-   0 S-   1  21-30   17    101-150    5
                           3-   9     9    10      S1-2   4  A-   1 C-   0  31-40    9    151-200    1
                           4-   0     0     0      S3-4  45  E-   1         41-50    5       >200    1
                                                   S >5   0  I-   0          > 50    4      TOTAL 2995     TOTAL     20

COMPUTER ORGANIZATION      0-   9    13    10      Q1-2   4  L-  51 P-   3   1-10   24      1- 50   70     IN-DPT     7
                           1-  57    53    55      Q3-4  25  R-  35 D-   0  11-20   29     51-100   15     OUT-DPT   45
                           2-  17    16    15      Q >5   6  T-   0 S-   0  21-30   17    101-150    5
                           3-   7     8    10      S1-2   1  A-   1 C-   0  31-40   16    151-200    0
                           4-   1     1     1      S3-4  52  E-   1         41-50    2       >200    1
                                                   S >5   0  I-   0          > 50    3      TOTAL 3236     TOTAL     52

SWITCHING THEORY           0-  12    10     5      Q1-2   1  L-  45 P-   3   1-10   23      1- 50   51     IN-DPT     2
                           1-  37    39    44      Q3-4  21  R-  15 D-   0  11-20   16     51-100    7     OUT-DPT    2
                           2-   8    10     8      Q >5   0  T-   0 S-   0  21-30    9    101-150    4
                           3-   5     4     6      S1-2   2  A-   0 C-   0  31-40    8    151-200    1
                           4-   2     1     1      S3-4  39  E-   1         41-50    2       >200    1
                                                   S >5   0  I-   0          > 50    6      TOTAL 2242     TOTAL      3

SEQUENTIAL MACHINES        0-   4     9     4      Q1-2   1  L-  18 P-   0   1-10   10      1- 50   20     IN-DPT     0
                           1-  16    11    16      Q3-4   8  R-   4 D-   0  11-20    6     51-100    3     OUT-DPT    1
                           2-   3     3     3      Q >5   1  T-   0 S-   0  21-30    4    101-150    0
                           3-   0     0     0      S1-2   0  A-   1 C-   0  31-40    3    151-200    0
                           4-   0     0     0      S3-4  13  E-   0         41-50    0       >200    0
                                                   S >5   0  I-   0          > 50    0      TOTAL  498     TOTAL      1

COMPILER CONSTRUCTION      0-  31    26    23      Q1-2   2  L-  83 P-   2   1-10   50      1- 50  121     IN-DPT    82
                           1-  83    92    94      Q3-4  49  R-  40 D-   0  11-20   44     51-100   11     OUT-DPT  156
                           2-  17    10    12      Q >5   3  T-   0 S-   5  21-30   24    101-150    3
                           3-   3     6     5      S1-2   3  A-   3 C-   0  31-40   11    151-200    0
                           4-   1     1     1      S3-4  76  E-   2         41-50    2       >200    0
                                                   S >5   1  I-   0          > 50    4      TOTAL 2987     TOTAL    238

FORMAL LANGUAGES AND       0-  27    26    15      Q1-2   3  L-  72 P-   0   1-10   51      1- 50   94     IN-DPT    62
 SYNTACTIC ANALYSIS        1-  61    62    73      Q3-4  36  R-  16 D-   0  11-20   29     51-100    3     OUT-DPT   26
                           2-   8     7     9      Q >5   6  T-   0 S-   3  21-30   12    101-150    2
                           3-   1     2     0      S1-2   1  A-   3 C-   1  31-40    5    151-200    0
                           4-   2     2     2      S3-4  51  E-   4         41-50    0       >200    0
                                                   S >5   0  I-   0          > 50    2      TOTAL 1507     TOTAL     88

INTRODUCTORY COMPUTER      0-  10     9     8      Q1-2   3  L-  40 P-   5   1-10   16      1- 50   39     IN-DPT     6
 ORGANIZATION              1-  33    33    30      Q3-4  24  R-  21 D-   0  11-20   11     51-100   18     OUT-DPT   57
                           2-  22    22    25      Q >5   1  T-   0 S-   0  21-30   18    101-150    8
                           3-   6     7     8      S1-2   5  A-   6 C-   0  31-40   15    151-200    5
                           4-   2     2     2      S3-4  38  E-   1         41-50    7       >200    3
                                                   S >5   0  I-   0          > 50    6      TOTAL 4512     TOTAL     63
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SUMMARY BY COURSE TYPE
CONTINUED

GROUP (DOCTORATE:)

COURSE DESCRIPTION	NUMBER OF TERMS OFFERED	76-77	77-78	78-79	CR HOURS QTR AND SEMESTER		MODE OF OPER				** AVERAGE ** NO.	SECT SIZE	*ENROLLMENT* 1976-77 * NO.	FREQ*	* COST COMPUTER SVCS 1976-77 (THOUS$) ON AND OFF-CAMPUS	
ADVANCED COMPUTER ORGANIZATION	0-	13	3	6	Q1-2	1	L-	32	P-	1	1-10	21	1- 50	44	IN-DPT	7
	1-	29	40	35	Q3-4	18	R-	8	C-	0	11-20	11	51-100	5	OUT-DPT	22
	2-	7	5	7	Q >5	0	T-	0	S-	2	21-30	11	101-150	0		
	3-	0	1	1	S1-2	0	A-	3	C-	0	31-40	2	151-200	0		
	4-	0	0	0	S3-4	29	E-	3			41-50	1	>200	0		
					S >5	0	I-	0			> 50	3	TOTAL	973	TOTAL	29
INFORMATION STORAGE AND RETRIEVAL	0-	8	7	6	Q1-2	2	L-	23	P-	0	1-10	15	1- 50	36	IN-DPT	43
	1-	25	23	25	Q3-4	8	R-	13	D-	0	11-20	14	51-100	2	OUT-DPT	27
	2-	6	8	7	Q >5	5	T-	0	S-	0	21-30	6	101-150	1		
	3-	0	1	1	S1-2	0	A-	3	C-	0	31-40	4	151-200	1		
	4-	1	1	1	S3-4	25	E-	1			41-50	0	>200	0		
					S >5	0	I-	0			> 50	1	TOTAL	1013	TOTAL	71
COMPUTER GRAPHICS	0-	16	7	12	Q1-2	2	L-	29	P-	0	1-10	26	1- 50	58	IN-DPT	11
	1-	36	45	39	Q3-4	20	R-	24	D-	0	11-20	23	51-100	2	OUT-DPT	56
	2-	6	6	7	Q >5	2	T-	0	S-	1	21-30	8	101-150	0		
	3-	3	3	3	S1-2	2	A-	2	C-	2	31-40	3	151-200	0		
	4-	0	0	0	S3-4	33	E-	2			41-50	0	>200	1		
					S >5	0	I-	1			> 50	1	TOTAL	1574	TOTAL	67
COMPUTABILITY	0-	19	17	15	Q1-2	2	L-	60	P-	0	1-10	41	1- 50	70	IN-DPT	1
	1-	46	47	51	Q3-4	20	R-	7	D-	0	11-20	21	51-100	3	OUT-DPT	2
	2-	8	9	7	Q >5	2	T-	0	S-	4	21-30	8	101-150	1		
	3-	2	2	2	S1-2	2	A-	1	C-	1	31-40	2	151-200	1		
	4-	0	0	0	S3-4	49	E-	1			41-50	2	>200	0		
					S >5	0	I-	1			> 50	1	TOTAL	1207	TOTAL	3
INTRODUCTORY NUMERICAL ANALYSIS (OR METHODS)	0-	15	12	17	Q1-2	1	L-	103	P-	2	1-10	39	1- 50	112	IN-DPT	79
	1-	81	79	76	Q3-4	26	R-	36	D-	0	11-20	51	51-100	22	OUT-DPT	82
	2-	32	35	33	Q >5	4	T-	0	S-	0	21-30	25	101-150	5		
	3-	16	18	18	S1-2	5	A-	4	C-	0	31-40	19	151-200	4		
	4-	3	3	3	S3-4	105	E-	2			41-50	7	>200	4		
					S >5	3	I-	0			> 50	6	TOTAL	5989	TOTAL	161
ADVANCED NUMERICAL ANALYSIS	0-	48	37	42	Q1-2	3	L-	127	P-	0	1-10	91	1- 50	148	IN-DPT	27
	1-	86	91	89	Q3-4	33	R-	20	D-	0	11-20	43	51-100	7	OUT-DPT	45
	2-	12	17	14	Q >5	11	T-	0	S-	1	21-30	17	101-150	0		
	3-	9	10	10	S1-2	0	A-	4	C-	0	31-40	3	151-200	1		
	4-	1	1	1	S3-4	108	E-	1			41-50	2	>200	0		
					S >5	1	I-	3			> 50	0	TOTAL	2282	TOTAL	72
INTRODUCTORY OPERATIONS RESEARCH	0-	10	6	8	Q1-2	0	L-	46	P-	0	1-10	25	1- 50	47	IN-DPT	1
	1-	34	35	35	Q3-4	13	R-	12	D-	0	11-20	13	51-100	4	OUT-DPT	15
	2-	7	9	7	Q >5	1	T-	0	S-	0	21-30	15	101-150	5		
	3-	4	5	6	S1-2	0	A-	0	C-	0	31-40	2	151-200	0		
	4-	3	3	2	S3-4	43	E-	0			41-50	1	>200	2		
					S >5	0	I-	0			> 50	2	TOTAL	3836	TOTAL	17
ADVANCED OPERATIONS RESEARCH	0-	14	11	12	Q1-2	0	L-	64	P-	0	1-10	30	1- 50	66	IN-DPT	0
	1-	46	50	50	Q3-4	11	R-	10	D-	0	11-20	27	51-100	4	OUT-DPT	70
	2-	10	10	8	Q >5	2	T-	0	S-	0	21-30	9	101-150	4		
	3-	4	3	4	S1-2	3	A-	0	C-	0	31-40	7	151-200	0		
	4-	0	0	0	S3-4	55	E-	0			41-50	1	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	1752	TOTAL	70
DATA COMMUNICATIONS	0-	6	9	2	Q1-2	1	L-	27	P-	0	1-10	12	1- 50	37	IN-DPT	2
	1-	31	28	35	Q3-4	13	R-	8	D-	0	11-20	16	51-100	1	OUT-DPT	9
	2-	1	1	1	Q >5	3	T-	0	S-	0	21-30	9	101-150	0		
	3-	0	0	0	S1-2	0	A-	3	C-	0	31-40	1	151-200	0		
	4-	0	0	0	S3-4	21	E-	0			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	616	TOTAL	11
PROCESS CONTROL	0-	4	5	2	Q1-2	0	L-	11	P-	0	1-10	7	1- 50	20	IN-DPT	2
	1-	12	11	13	Q3-4	5	R-	10	D-	0	11-20	12	51-100	1	OUT-DPT	7
	2-	3	2	3	Q >5	0	T-	0	S-	0	21-30	2	101-150	0		
	3-	1	2	2	S1-2	0	A-	0	C-	0	31-40	0	151-200	0		
	4-	0	1	1	S3-4	14	E-	0			41-50	0	>200	0		
					S >5	1	I-	0			> 50	0	TOTAL	261	TOTAL	9
DATA PREPARATION (KEY PUNCH, VERIFIER, DATA ENTRY,....)	0-	1	1	1	Q1-2	1	L-	0	P-	1	1-10	1	1- 50	1	IN-DPT	0
	1-	2	0	0	Q3-4	0	R-	3	D-	0	11-20	0	51-100	1	OUT-DPT	0
	2-	1	3	1	Q >5	0	T-	0	S-	0	21-30	0	101-150	2		
	3-	0	0	2	S1-2	1	A-	0	C-	0	31-40	3	151-200	0		
	4-	0	0	0	S3-4	2	E-	0			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	308	TOTAL	0
UNIT RECORD (EAM)	0-	0	0	0	Q1-2	0	L-	1	P-	0	1-10	0	1- 50	0	IN-DPT	0
	1-	0	0	0	Q3-4	0	R-	0	D-	0	11-20	0	51-100	1	OUT-DPT	0
	2-	1	1	1	Q >5	0	T-	0	S-	0	21-30	0	101-150	0		
	3-	0	0	0	S1-2	0	A-	0	C-	0	31-40	0	151-200	0		
	4-	0	0	0	S3-4	1	E-	0			41-50	1	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	100	TOTAL	0

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                                              SUMMARY BY CCURSE TYPE
  GROUP (        DOCTORATE:            )       CONTINUED
                    NUMBER  OF  TERMS            CR HOURS                               **  AVERAGE ** *ENRCLLMENT* CCST COMPUTER SVCS
 COURSE DESCRIPTION      OFFERED                 QTR AND                                      SECT     * 1976-77  * 1976-77 (THOUSS)
                     76-77 77-78 78-79           SEMESTER    MCDE CF OPER          NO.    SIZE     * NO.   FREQ* ON ANC OFF-CAMPUS

INTRODUCTORY COURSE      0-   4     4     5      Q1-2     3  L-  25 P-   0   1-10    11         1- 50   28        IN-CPT     28
 IN DATA PROCESSING      1-  18    17    16      Q3-4    10  R-  32 D-   0  11-20    14        51-100   11       OUT-DPT    195
                         2-  15    15    13      Q >5     0  T-   0 S-   0  21-30    14       101-150    2
                         3-  18    19    23      S1-2     6  A-   2 C-   0  31-40     9       151-200    3
                         4-   9     9     7      S3-4    39  E-   5         41-50     8          >200   21
                                                 S >5     0  I-   1          > 50     9         TOTAL 17000       TOTAL     223

ADVANCED COURSE IN DATA  0-   8     7     6      Q1-2     1  L-  13 P-   1   1-10     9         1- 50   23        IN-DPT     21
 PROCESSING              1-  12    12    13      Q3-4     7  R-  19 D-   0  11-20    10        51-100    7       OUT-DPT     15
                         2-   9     9     9      Q >5     1  T-   0 S-   0  21-30     7       101-150    3
                         3-   8     9     9      S1-2     5  A-   0 C-   0  31-40     9       151-200    2
                         4-   0     0     0      S3-4    20  E-   4         41-50     1          >200    2
                                                 S >5     0  I-   0          > 50     1         TOTAL  2229       TOTAL      36

PRCBLEM SOLVING COURSE   0-  14    19    22      Q1-2     1  L-  26 P-   0   1-10    25         1- 5C   46        IN-DPT     22
 IN BUSINESS APPLI-      1-  34    33    31      Q3-4    15  R-  29 D-   0  11-20     8        51-100    7       CUT-DPT    238
 CATIONS                 2-  10     8     7      Q >5     1  T-   0 S-   2  21-30    17       101-150    8
                         3-  17    14    14      S1-2     0  A-  17 C-   0  31-40    24       151-200    3
                         4-   4     5     5      S3-4    61  E-   2         41-50     4          >200   15
                                                 S >5     0  I-   3          > 50     1         TOTAL 10645       TOTAL     260

ADVANCED BUSINESS APPLI- 0-   9    12    14      Q1-2     2  L-  20 P-   0   1-10    13         1- 50   27        IN-DPT      1
 CATIONS (MARKETING,     1-  13     9    10      Q3-4     8  R-   7 D-   0  11-20     7        51-100    3       OUT-DPT      8
 FINANCE, PRODUCTION,    2-  11     7     6      Q >5     2  T-   0 S-   1  21-30     7       101-150    3
 ETC.)                   3-   3     5     4      S1-2     2  A-   8 C-   0  31-40     6       151-200    2
                         4-   1     4     3      S3-4    23  E-   0         41-50     2          >200    2
                                                 S >5     0  I-   1          > 50     2         TOTAL  1964       TOTAL       8

INTRODUCTORY SYSTEMS     0-   7     1     4      Q1-2     0  L-  15 P-   0   1-10     8         1- 50   29        IN-DPT     11
 ANALYSIS (BUSINESS)     1-  20    22    21      Q3-4    11  R-  16 D-   0  11-20    15        51-100    6       CUT-DPT      9
                         2-   7    11     8      Q >5     2  T-   0 S-   1  21-30    12       101-150    3
                         3-   5     5     6      S1-2     1  A-   8 C-   0  31-40     4       151-200    1
                         4-   3     3     3      S3-4    25  E-   2         41-50     1          >200    3
                                                 S >5     0  I-   0          > 50     2         TOTAL  2352       TOTAL      20

LARGE SCALE INFORMATION  0-   3     0     0      Q1-2     1  L-   6 P-   0   1-10     5         1- 50   13        IN-OPT      1
 PROCESSING SYSTEMS      1-   8    10     9      Q3-4     2  R-   3 D-   0  11-20     4        51-100    2       OUT-DPT     20
                         2-   2     3     4      Q >5     0  T-   0 S-   2  21-30     2       101-150    0
                         3-   2     2     2      S1-2     0  A-   2 C-   0  31-40     1       151-200    0
                         4-   0     0     0      S3-4    11  E-   1         41-50     3          >200    0
                                                 S >5     0  I-   1          > 50     0         TOTAL   386       TOTAL      21

FILE ORGANIZATION        0-   5     7     2      Q1-2     0  L-  15 P-   0   1-10     9         1- 50   24        IN-DPT     40
                         1-  18    12    15      Q3-4     9  R-  10 D-   0  11-20     5        51-100    0       OUT-DPT     12
                         2-   2     4     6      Q >5     1  T-   0 S-   0  21-30     5       101-150    1
                         3-   1     3     3      S1-2     0  A-   0 C-   0  31-40     5       151-200    1
                         4-   0     0     0      S3-4    14  E-   1         41-50     1          >200    0
                                                 S >5     0  I-   0          > 50     1         TOTAL   742       TOTAL      52

DATA BASE MANAGEMENT     0-  17     8     6      Q1-2     3  L-  54 P-   0   1-10    25         1- 50   73        IN-DPT     48
                         1-  50    54    56      Q3-4    22  R-  16 D-   0  11-20    30        51-100   12       OUT-DPT     41
                         2-  15    18    20      Q >5     1  T-   2 S-   3  21-30    16       101-150    0
                         3-   3     5     3      S1-2     1  A-   5 C-   0  31-40     7       151-200    0
                         4-   0     0     0      S3-4    55  E-   5         41-50     6          >200    0
                                                 S >5     1  I-   0          > 50     1         TOTAL  2163       TOTAL      90

INFORMATION SYSTEMS      0-   8     3     4      Q1-2     5  L-  26 P-   1   1-10    20         1- 50   44        IN-DPT      6
 DESIGN (INTRODUCTORY)   1-  30    36    35      Q3-4    17  R-  22 D-   1  11-20    14        51-100    6       CUT-DPT     50
                         2-  13    11    10      Q >5     2  T-   0 S-   1  21-30    10       101-150    5
                         3-   3     4     5      S1-2     0  A-   3 C-   0  31-40     4       151-200    0
                         4-   2     2     2      S3-4    31  E-   2         41-50     5          >200    1
                                                 S >5     0  I-   0          > 50     3         TOTAL  2296       TOTAL      56

INFORMATICN SYSTEMS      0-   8     7     7      Q1-2     1  L-  28 P-   1   1-10    26         1- 50   48        IN-CPT      8
 DESIGN (ADVANCED)       1-  36    37    36      Q3-4    20  R-  15 D-   0  11-20    16        51-100    4       OUT-DPT     27
                         2-   8     8     8      Q >5     1  T-   0 S-   2  21-30     3       101-150    0
                         3-   0     0     1      S1-2     0  A-   2 C-   0  31-40     5       151-200    1
                         4-   1     1     1      S3-4    27  E-   3         41-50     2          >200    0
                                                 S >5     1  I-   2          > 50     1         TOTAL  1104       TOTAL      35

MANAGEMENT INFORMATION   0-   7     6     4      Q1-2     0  L-  30 P-   0   1-10    14         1- 50   36        IN-DPT     38
 SYSTEMS                 1-  24    29    31      Q3-4    13  R-  10 D-   0  11-20     9        51-100    8       OUT-DPT     27
                         2-  14     9     9      Q >5     1  T-   1 S-   1  21-30    14       101-150    2
                         3-   3     5     5      S1-2     2  A-   9 C-   0  31-40     9       151-200    1
                         4-   4     3     3      S3-4    30  E-   1         41-50     2          >200    5
                                                 S >5     3  I-   0          > 50     4         TOTAL  3516       TOTAL      65

MANAGEMENT OF COMPUTER   0-   8     4     3      Q1-2     1  L-  17 P-   0   1-10    14         1- 50   26        IN-DPT      3
 CENTERS OF INFCRMATION  1-  15    17    16      Q3-4     8  R-   3 D-   0  11-20    10        51-100    1       CUT-DPT      2
  PROCESSING DEPARTMENTS 2-   4     6     8      Q >5     0  T-   2 S-   1  21-30     1       101-150    0
                         3-   0     0     0      S1-2     0  A-   4 C-   0  31-40     0       151-200    0
                         4-   0     0     0      S3-4    17  E-   0         41-50     2          >200
                                                 S >5     0  I-   0          > 50     0         TOTAL   53[illegible]       TOTAL       5
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INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, ANC INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                 CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSCURI-ROLLA                    PAGE X-37
                            UNDER A GRANT FROM THE NATIONAL SCIENCE FGUNDATION

                                                   SUMMARY BY COURSE TYPE
       GROUP (          DCCTCRATE:            )    CONTINUED
                            NUMBER  OF  TERMS          CR HCURS                          **  AVERAGE ** *ENRCLLMENT* COST COMPUTER SVCS
     COURSE DESCRIPTION          OFFERED               QTR AND                                 SECT      * 1976-77  * 1976-77 (THOUS$)
                              76-77 77-78 78-79        SEMESTER     MODE OF OPER        NO.    SIZE      * NO.  FREC* ON ANC OFF-CAMPUS

   COMPUTERS AND ACCOUNTING 0-    1     3     4        Q1-2     0  L-    5 P-   0   1-10      1          1- 50     2        IN-DPT     81
    (INCLUDING AUDITING)    1-    2     1     0        Q3-4     1  R-    2 D-   0  11-20      0         51-100     2       OUT-DPT      2
                            2-    1     1     1        Q >5     1  T-    0 S-   0  21-30      4        101-150     2
                            3-    3     3     3        S1-2     0  A-    1 C-   0  31-40      2        151-200     1
                            4-    2     1     1        S3-4     6  E-    1          41-50      1           >200     2
                                                       S >5     0  I-    0           > 50      1          TOTAL  1163        TOTAL       83

   ECONOMETRIC SIMULATION   0-    3     4     4        Q1-2     0  L-    9 P-   0   1-10      9          1- 50    12        IN-DPT      0
    APPLICATIONS            1-    7     7     5        Q3-4     6  R-    5 D-   0  11-20      1         51-100     1       OUT-DPT      1
                            2-    4     2     4        Q >5     2  T-    0 S-   0  21-30      4        101-150     1
                            3-    0     1     1        S1-2     0  A-    0 C-   0  31-40      0        151-200     0
                            4-    0     0     0        S3-4     6  E-    0          41-50      0           >200     0
                                                       S >5     0  I-    0           > 50      0          TOTAL   259        TOTAL        1

   INSTRUCTIONAL DESIGN     0-    0     2     0        Q1-2     0  L-    2 P-   0   1-10      1          1- 50     2        IN-DPT      0
                            1-    2     0     2        Q3-4     0  R-    0 D-   0  11-20      1         51-100     0       OUT-DPT      0
                            2-    0     0     0        Q >5     0  T-    0 S-   0  21-30      0        101-150     0
                            3-    0     0     0        S1-2     0  A-    0 C-   0  31-40      0        151-200     0
                            4-    0     0     0        S3-4     2  E-    0          41-50      0           >200     0
                                                       S >5     0  I-    0           > 50      0          TOTAL    23        TOTAL        0

   INSTRUCTIONAL SYSTEMS    0-    2     3     1        Q1-2     0  L-    1 P-   2   1-10      3          1- 50     5        IN-DPT      3
                            1-    3     1     4        Q3-4     0  R-    1 D-   0  11-20      1         51-100     0       OUT-DPT      0
                            2-    1     2     1        Q >5     0  T-    0 S-   0  21-30      1        101-150     1
                            3-    0     0     0        S1-2     0  A-    0 C-   1  31-40      0        151-200     0
                            4-    0     0     0        S3-4     6  E-    1          41-50      0           >200     0
                                                       S >5     0  I-    0           > 50      1          TOTAL   173        TOTAL        3

   COMPUTER EASEC           0-    2     4     4        Q1-2     0  L-    5 P-   1   1-10      7          1- 50    12        IN-DPT      1
   INSTRUCTICN              1-    6     6     6        Q3-4     2  R-    5 D-   0  11-20      4         51-100     2       OUT-DPT      1
                            2-    6     4     4        Q >5     1  T-    0 S-   1  21-30      1        101-150     1
                            3-    0     0     0        S1-2     1  A-    0 C-   2  31-40      2        151-200     0
                            4-    1     1     1        S3-4    11  E-    1          41-50      1           >200     0
                                                       S >5     0  I-    0           > 50      0          TOTAL   426        TOTAL        1

   OTHER                    0-  134   112   126        Q1-2    49  L-  332 P-  17   1-10    389          1- 50   605        IN-DPT    101
                            1-  291   317   304        Q3-4   171  R-   81 D-  41  11-20    164         51-100    53       OUT-DPT    462
                            2-  111   109   110        Q >5    42  T-    0 S-  85  21-30     59        101-150    16
                            3-  110   107   105        S1-2    99  A-    4 C-   0  31-40     38        151-200     3
                            4-   46    47    47        S3-4   298  E-    4          41-50     20           >200    15
                                                       S >5    19  I-  128           > 50     22          TCTAL 21204        TCTAL      564

   DESCRIPTION NOT CODED    0-   96   120   145        Q1-2    21  L-  240 P-   1   1-10    200          1- 50   258        IN-DPT      0
                            1-  145   128   116        Q3-4    77  R-   50 D-   4  11-20     35         51-100    28       OUT-DPT     17
                            2-   44    41    38        Q >5     5  T-    0 S-   8  21-30     31        101-150    11
                            3-   12    13     3        S1-2    41  A-    1 C-   0  31-40     12        151-200     6
                            4-   20    17    17        S3-4   172  E-    1          41-50     35           >200    16
                                                       S >5     3  I-   14           > 50      6          TOTAL 13722        TOTAL       17
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                                         SUMMARY BY CCURSE TYPE
  GROUP I               BELOW 500  )
                      NUMBER  OF  TERMS          CR HCURS                                 **  AVERAGE ** *ENRCLLMENT* CCST COMPUTER SVCS
COURSE DESCRIPTION         OFFERED               QTR AND                                      SECT     * 1976-77  * 1976-77 (THOUS$)
                       76-77 77-78 78-79         SEMESTER   MODE OF OPER       NO.   SIZE     * NO.  FREQ* ON AND OFF-CAMPUS

COMPUTER APPRECIATION   0-   2     0     1       Q1-2    0  L-   1 P-   0  1-10     0         1- 50    4      IN-DPT      0
                        1-   2     4     3       Q3-4    1  R-   2 D-   0 11-20     3        51-100    0     OUT-DPT      0
                        2-   0     0     0       Q >5    0  T-   0 S-   0 21-30     1       101-150    0
                        3-   0     0     0       S1-2    C  A-   1 C-   0 31-40     0       151-200    0
                        4-   0     0     0       S3-4    2  E-   0        41-50     0          >200    0
                                                 S >5    0  I-   0        > 50     0         TOTAL   45      TOTAL        0

INTRODUCTORY COURSE IN  0-   6     1     6       Q1-2    1  L-   2 P-   0  1-10    14         1- 50   27      IN-DPT     20
 SOME COMPILER LANGUAGE 1-  14    18    14       Q3-4    4  R-  26 D-   0 11-20    13        51-100    1     OUT-DPT      1
 SUCH AS FORTRAN, PL/1, 2-   6     8     7       Q >5    1  T-   0 S-   0 21-30     0       101-150    0
 BASIC, ALGCL           3-   2     1     1       S1-2    5  A-   0 C-   0 31-40     1       151-200    0
                        4-   0     0     0       S3-4   13  E-   0        41-50     0          >200    0
                                                 S >5    0  I-   0        > 50     0         TOTAL  427      TOTAL       21

INTRODUCTORY CCURSE IN A 0-  4     3     2       Q1-2    0  L-   0 P-   0  1-10     7         1- 50   11      IN-DPT      3
 LANGUAGE SUCH AS COBOL 1-   7     6     7       Q3-4    3  R-  11 C-   0 11-20     3        51-100    1     OUT-DPT      0
                        2-   1     3     3       Q >5    1  T-   0 S-   1 21-30     1       101-150    0
                        3-   0     0     0       S1-2    1  A-   0 C-   0 31-40     0       151-200    0
                        4-   0     0     0       S3-4    7  E-   0        41-50     1          >200    0
                                                 S >5    0  I-   0        > 50     0         TOTAL  155      TOTAL        3

PROBLEM SOLVING COURSE  0-   0     0     0       Q1-2    1  L-   0 P-   0  1-10     1         1- 50    3      IN-DPT      0
 IN ENGINEERING OR      1-   1     1     1       Q3-4    1  R-   3 D-   0 11-20     2        51-100    0     OUT-DPT      0
 SCIENTIFIC APPLI-      2-   1     1     1       Q >5    0  T-   0 S-   0 21-30     0       101-150    0
 CATIONS                3-   1     1     1       S1-2    1  A-   0 C-   0 31-40     0       151-200    0
                        4-   0     0     0       S3-4    0  E-   0        41-50     0          >200    0
                                                 S >5    0  I-   0        > 50     0         TOTAL   69      TOTAL        0

INTRODUCTORY COURSE IN  0-   1     0     1       Q1-2    0  L-   1 P-   0  1-10     3         1- 50    4      IN-DPT     17
 PROGRAMMING            1-   0     1     0       Q3-4    1  R-   4 D-   0 11-20     0        51-100    1     OUT-DPT      0
                        2-   3     2     2       Q >5    2  T-   0 S-   0 21-30     2       101-150    0
                        3-   1     2     2       S1-2    0  A-   0 C-   0 31-40     0       151-200    0
                        4-   0     0     0       S3-4    2  E-   0        41-50     0          >200    0
                                                 S >5    0  I-   0        > 50     0         TOTAL  152      TOTAL       17

ACVANCED CCURSE IN      0-   3     0     0       Q1-2    0  L-   0 P-   0  1-10     5         1- 50    7      IN-DPT      6
 PROGRAMMING            1-   4     5     4       Q3-4    2  R-   7 D-   0 11-20     2        51-100    0     OUT-DPT      2
                        2-   0     2     3       Q >5    1  T-   0 S-   0 21-30     0       101-150    0
                        3-   0     0     0       S1-2    0  A-   0 C-   0 31-40     0       151-200    0
                        4-   0     0     0       S3-4    3  E-   0        41-50     0          >200    0
                                                 S >5    0  I-   0        > 50     0         TOTAL   40      TOTAL        7

OPERATING SYSTEMS       0-   1     0     2       Q1-2    0  L-   0 P-   0  1-10     4         1- 50    4      IN-DPT      1
 (SYSTEMS PROGRAMMING,  1-   3     4     2       Q3-4    1  R-   4 D-   0 11-20     0        51-100    0     OUT-DPT      0
  ETC.)                 2-   0     0     0       Q >5    0  T-   0 S-   0 21-30     0       101-150    0
                        3-   0     0     0       S1-2    0  A-   0 C-   0 31-40     0       151-200    0
                        4-   0     0     0       S3-4    3  E-   0        41-50     0          >200    0
                                                 S >5    0  I-   0        > 50     0         TOTAL   20      TOTAL        1

DATA STRUCTURES         0-   1     1     0       Q1-2    0  L-   0 P-   0  1-10     1         1- 50    1      IN-DPT      0
                        1-   0     0     1       Q3-4    0  R-   0 D-   0 11-20     0        51-100    0     OUT-DPT      0
                        2-   0     0     0       Q >5    0  T-   0 S-   1 21-30     0       101-150    0
                        3-   0     0     0       S1-2    0  A-   0 C-   0 31-40     0       151-200    0
                        4-   0     0     0       S3-4    0  E-   0        41-50     0          >200    0
                                                 S >5    0  I-   0        > 50     0         TOTAL    0      TOTAL        0

SIMULATICN APPLICATIONS 0-   0     0     0       Q1-2    0  L-   0 P-   0  1-10     1         1- 50    2      IN-DPT      2
 (NON-ECONCMETRIC)      1-   2     2     2       Q3-4    0  R-   1 D-   0 11-20     1        51-100    0     OUT-DPT      0
                        2-   0     0     0       Q >5    0  T-   0 S-   0 21-30     0       101-150    0
                        3-   0     0     0       S1-2    0  A-   0 C-   0 31-40     0       151-200    0
                        4-   0     0     0       S3-4    2  E-   0        41-50     0          >200    0
                                                 S >5    0  I-   1        > 50     0         TOTAL   19      TOTAL        2

HYBRID COMPUTERS        0-   0     0     0       Q1-2    0  L-   0 P-   0  1-10     0         1- 50    1      IN-DPT      0
                        1-   1     1     1       Q3-4    0  R-   1 D-   0 11-20     1        51-100    0     OUT-DPT      0
                        2-   0     0     0       Q >5    0  T-   0 S-   0 21-30     0       101-150    0
                        3-   0     0     0       S1-2    0  A-   0 C-   0 31-40     0       151-200    0
                        4-   0     0     0       S3-4    1  E-   0        41-50     0          >200    0
                                                 S >5    0  I-   0        > 50     0         TOTAL   14      TOTAL        0

DISCRETE STRUCTURES     0-   2     0     2       Q1-2    0  L-   2 P-   0  1-10     2         1- 50    2      IN-DPT      0
                        1-   0     2     0       Q3-4    0  R-   0 D-   0 11-20     0        51-100    0     OUT-DPT      0
                        2-   0     0     0       Q >5    0  T-   0 S-   0 21-30     0       101-150    0
                        3-   0     0     0       S1-2    0  A-   0 C-   0 31-40     0       151-200    0
                        4-   0     0     0       S3-4    2  E-   0        41-50     0          >200    0
                                                 S >5    0  I-   0        > 50     0         TOTAL    0      TOTAL        0

COMPUTER ORGANIZATION   0-   1     0     1       Q1-2    0  L-   0 P-   0  1-10     1         1- 50    2      IN-DPT     18
                        1-   1     3     2       Q3-4    2  R-   3 D-   0 11-20     3        51-100    2     OUT-DPT      0
                        2-   1     0     0       Q >5    0  T-   0 S-   0 21-30     0       101-150    0
                        3-   1     1     1       S1-2    1  A-   1 C-   0 31-40     0       151-200    0
                        4-   0     0     0       S3-4    1  E-   0        41-50     0          >200    0
                                                 S >5    0  I-   0        > 50     0         TCTAL  132      TOTAL       18
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                                                  SUMMARY BY COURSE TYPE
     GROUP (             BELOW 500  )             CONTINUED
                      NUMBER  OF  TERMS             CR HCURS                           **  AVERAGE  ** *ENROLLMENT* COST COMPUTER SVCS
COURSE DESCRIPTION          OFFEREC                 QTR AND                                   SECT    * 1976-77   * 1976-77 (THOUS$)
                        76-77 77-78 78-79           SEMESTER    MODE OF OPER         NO.      SIZE    * NO.   FREQ* ON AND OFF-CAMPUS
SWITCHING THEORY            0-   0    0    0      Q1-2  0  L-  0  P-  0    1-10   0       1- 50    0     IN-DPT   17
                            1-   0    0    0      Q3-4  1  R-  1  D-  0   11-20   0      51-100    1    OUT-DPT    0
                            2-   0    0    0      Q >5  0  T-  0  S-  0   21-30   1     101-150    0
                            3-   1    1    1      S1-2  0  A-  0  C-  0   31-40   0     151-200    0
                            4-   0    0    0      S3-4  0  E-  0          41-50   0        >200    0
                                                  S >5  0  I-  0           > 50   0       TOTAL   72      TOTAL   17

SEQUENTIAL MACHINES         0-   0    0    0      Q1-2  0  L-  0  P-  0    1-10   0       1- 50    0     IN-DPT   17
                            1-   0    0    0      Q3-4  1  R-  1  D-  0   11-20   0      51-100    1    OUT-DPT    0
                            2-   0    0    1      Q >5  0  T-  0  S-  0   21-30   1     101-150    0
                            3-   1    1    0      S1-2  0  A-  0  C-  0   31-40   0     151-200    0
                            4-   0    0    0      S3-4  0  E-  0          41-50   0        >200    0
                                                  S >5  0  I-  0           > 50   0       TCTAL   72      TOTAL   17

INTRODUCTORY COMPUTER       0-   0    0    0      Q1-2  0  L-  1  P-  0    1-10   0       1- 50    1     IN-DPT    0
 ORGANIZATION               1-   1    1    1      Q3-4  0  R-  0  D-  0   11-20   0      51-100    0    OUT-DPT    0
                            2-   0    0    0      Q >5  0  T-  0  S-  0   21-30   1     101-150    0
                            3-   0    0    0      S1-2  0  A-  0  C-  0   31-40   0     151-200    0
                            4-   0    0    0      S3-4  0  E-  0          41-50   0        >200    0
                                                  S >5  0  I-  0           > 50   0       TOTAL   27      TOTAL    0

ADVANCED CCMPUTER           0-   0    0    0      Q1-2  0  L-  0  P-  0    1-10   1       1- 50    2     IN-DPT    1
 ORGANIZATICN               1-   2    2    2      Q3-4  1  R-  2  D-  0   11-20   1      51-100    0    OUT-DPT    0
                            2-   0    0    0      Q >5  0  T-  0  S-  0   21-30   0     101-150    0
                            3-   0    0    0      S1-2  1  A-  0  C-  0   31-40   0     151-200    0
                            4-   0    0    0      S3-4  0  E-  0          41-50   0        >200    0
                                                  S >5  0  I-  0           > 50   0       TOTAL   24      TOTAL    1

INFORMATION STORAGE         0-   0    0    0      Q1-2  0  L-  0  P-  0    1-10   0       1- 50    0     IN-DPT    0
 AND RETRIEVAL              1-   0    0    0      Q3-4  0  R-  1  D-  0   11-20   0      51-100    0    OUT-DPT    0
                            2-   0    0    0      Q >5  0  T-  0  S-  0   21-30   0     101-150    0
                            3-   0    0    0      S1-2  1  A-  0  C-  0   31-40   0     151-200    0
                            4-   1    1    1      S3-4  0  E-  0          41-50   0        >200    1
                                                  S >5  0  I-  0           > 50   1       TOTAL  604      TOTAL    0

COMPUTER GRAPHICS           0-   0    0    0      Q1-2  0  L-  0  P-  0    1-10   1       1- 50    1     IN-DPT    0
                            1-   1    1    1      Q3-4  0  R-  1  D-  0   11-20   0      51-100    0    OUT-DPT    0
                            2-   0    0    0      Q >5  0  T-  0  S-  0   21-30   0     101-150    0
                            3-   0    0    0      S1-2  1  A-  0  C-  0   31-40   0     151-200    0
                            4-   0    0    0      S3-4  0  E-  0          41-50   0        >200    0
                                                  S >5  0  I-  0           > 50   0       TOTAL   10      TOTAL    0

COMPUTABILITY               0-   0    0    0      Q1-2  0  L-  0  P-  0    1-10   0       1- 50    2     IN-DPT    0
                            1-   1    1    1      Q3-4  0  R-  0  D-  0   11-20   2      51-100    0    OUT-DPT    0
                            2-   0    0    0      Q >5  0  T-  0  S-  0   21-30   0     101-150    0
                            3-   1    1    1      S1-2  0  A-  2  C-  0   31-40   0     151-200    0
                            4-   0    0    0      S3-4  2  E-  0          41-50   0        >200    0
                                                  S >5  0  I-  0           > 50   0       TOTAL   63      TOTAL    0

INTRODUCTORY NUMERICAL      0-   0    1    0      Q1-2  0  L-  0  P-  0    1-10   1       1- 50    3     IN-DPT    0
 ANALYSIS (OR METHODS)      1-   3    2    3      Q3-4  1  R-  3  D-  0   11-20   2      51-100    0    OUT-DPT    0
                            2-   0    0    0      Q >5  0  T-  0  S-  0   21-30   0     101-150    0
                            3-   0    0    0      S1-2  0  A-  0  C-  0   31-40   0     151-200    0
                            4-   0    0    0      S3-4  1  E-  0          41-50   0        >200    0
                                                  S >5  0  I-  0           > 50   0       TOTAL   38      TOTAL    0

ADVANCED NUMERICAL          0-   0    0    0      Q1-2  0  L-  0  P-  0    1-10   0       1- 50    1     IN-DPT    0
 ANALYSIS                   1-   1    1    1      Q3-4  0  R-  1  D-  0   11-20   1      51-100    0    OUT-DPT    0
                            2-   0    0    0      Q >5  0  T-  0  S-  0   21-30   0     101-150    0
                            3-   0    0    0      S1-2  0  A-  0  C-  0   31-40   0     151-200    0
                            4-   0    0    0      S3-4  1  E-  0          41-50   0        >200    0
                                                  S >5  0  I-  0           > 50   0       TOTAL   14      TOTAL    0

DATA COMMUNICATIONS         0-   0    1    1      Q1-2  0  L-  0  P-  0    1-10   0       1- 50    1     IN-DPT    4
                            1-   1    0    0      Q3-4  1  R-  1  D-  0   11-20   1      51-100    0    OUT-DPT    0
                            2-   0    0    0      Q >5  0  T-  0  S-  0   21-30   0     101-150    0
                            3-   0    0    0      S1-2  0  A-  0  C-  0   31-40   0     151-200    0
                            4-   0    0    0      S3-4  0  E-  0          41-50   0        >200    0
                                                  S >5  0  I-  0           > 50   0       TOTAL   18      TOTAL    4

PROCESS CONTROL             0-   0    0    0      Q1-2  0  L-  0  P-  0    1-10   1       1- 50    1     IN-DPT    0
                            1-   1    1    1      Q3-4  0  R-  1  D-  0   11-20   0      51-100    0    OUT-DPT    0
                            2-   0    0    0      Q >5  0  T-  0  S-  0   21-30   0     101-150    0
                            3-   0    0    0      S1-2  0  A-  0  C-  0   31-40   0     151-200    0
                            4-   0    0    0      S3-4  1  E-  0          41-50   0        >200    0
                                                  S >5  0  I-  0           > 50   0       TOTAL   10      TOTAL    0

DATA PREPARATION (KEY       0-   1    3    2      Q1-2  0  L-  0  P-  0    1-10   2       1- 50    6     IN-DPT    4
 PUNCH, VERIFIER, DATA      1-   1    0    3      Q3-4  1  R-  6  D-  0   11-20   4      51-100    0    OUT-DPT    0
 ENTRY,...)                 2-   4    2    0      Q >5  0  T-  0  S-  0   21-30   0     101-150    0
                            3-   0    0    0      S1-2  2  A-  0  C-  0   31-40   0     151-200    0
                            4-   0    1    1      S3-4  3  E-  0          41-50   0        >200    0
                                                  S >5  0  I-  0           > 50   0       TOTAL  142      TOTAL    4
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                                                   SUMMARY BY COURSE TYPE
      GROUP (               BELOW 500  )           CONTINUED
                          NUMBER  OF  TERMS              CR HOURS                          **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
   COURSE DESCRIPTION         OFFERED                    QTR AND                                SECT      * 1976-77  * 1976-77 (THOUS$)
                          76-77 77-78 78-79              SEMESTER     MODE CF OPER        NO.   SIZE      * NO.  FREQ* ON AND OFF-CAMPUS

UNIT RECORD (EAM)          0-   0     0     0            Q1-2    0  L-   0 P-   0   1-10      0        1- 50     1       IN-DPT      0
                           1-   1     1     1            Q3-4    0  R-   1 D-   0  11-20      1       51-100     0      OUT-DPT      0
                           2-   0     0     0            Q >5    0  T-   0 S-   0  21-30      0      101-150     0
                           3-   0     0     0            S1-2    1  A-   0 C-   0  31-40      0      151-200     0
                           4-   0     0     0            S3-4    0  E-   0         41-50      0         >200     0
                                                         S >5    0  I-   0          > 50      0        TOTAL    24      TOTAL        0

INTRODUCTORY COURSE        0-   0     1     1            Q1-2    0  L-   4 P-   0   1-10      2        1- 50    10       IN-DPT      1
 IN DATA PROCESSING        1-   5     5     5            Q3-4    1  R-   5 D-   0  11-20      5       51-100     0      OUT-DPT      0
                           2-   4     3     3            Q >5    0  T-   0 S-   0  21-30      2      101-150     0
                           3-   1     0     0            S1-2    0  A-   1 C-   0  31-40      1      151-200     0
                           4-   0     1     1            S3-4    7  E-   0         41-50      0         >200     0
                                                         S >5    0  I-   0          > 50      0        TOTAL   286      TOTAL        1

ADVANCED COURSE IN DATA    0-   0     0     0            Q1-2    0  L-   1 P-   1   1-10      3        1- 50     3       IN-DPT      1
 PROCESSING                1-   3     2     2            Q3-4    1  R-   1 D-   0  11-20      0       51-100     0      OUT-DPT      1
                           2-   0     1     1            Q >5    0  T-   0 S-   0  21-30      0      101-150     0
                           3-   0     0     0            S1-2    0  A-   0 C-   0  31-40      0      151-200     0
                           4-   0     0     0            S3-4    1  E-   0         41-50      0         >200     0
                                                         S >5    0  I-   0          > 50      0        TOTAL    16      TOTAL        1

PROBLEM SOLVING COURSE     0-   1     1     0            Q1-2    0  L-   0 P-   0   1-10      1        1- 50     1       IN-DPT      0
 IN BUSINESS APPLI-        1-   0     0     1            Q3-4    1  R-   1 D-   0  11-20      0       51-100     0      OUT-DPT      0
 CATIONS                   2-   0     0     0            Q >5    0  T-   0 S-   0  21-30      0      101-150     0
                           3-   0     0     0            S1-2    0  A-   0 C-   0  31-40      0      151-200     0
                           4-   0     0     0            S3-4    0  E-   0         41-50      0         >200     0
                                                         S >5    0  I-   0          > 50      0        TOTAL     0      TOTAL        0

ADVANCED BUSINESS APPLI-   0-   1     1     0            Q1-2    0  L-   0 P-   0   1-10      3        1- 50     3       IN-DPT      0
 CATIONS (MARKETING,       1-   2     2     3            Q3-4    1  R-   2 D-   0  11-20      0       51-100     0      OUT-DPT      0
 FINANCE, PRODUCTION,      2-   0     0     0            Q >5    0  T-   0 S-   1  21-30      0      101-150     0
 ETC.)                     3-   0     0     0            S1-2    0  A-   0 C-   0  31-40      0      151-200     0
                           4-   0     0     0            S3-4    2  E-   0         41-50      0         >200     0
                                                         S >5    0  I-   0          > 50      0        TOTAL    11      TOTAL        0

INTRODUCTORY SYSTEMS       0-   1     1     0            Q1-2    0  L-   2 P-   0   1-10      2        1- 50     2       IN-DPT      0
 ANALYSIS (BUSINESS)       1-   1     1     2            Q3-4    1  R-   0 D-   0  11-20      0       51-100     0      OUT-DPT      0
                           2-   0     0     0            Q >5    0  T-   0 S-   0  21-30      0      101-150     0
                           3-   0     0     0            S1-2    0  A-   0 C-   0  31-40      0      151-200     0
                           4-   0     0     0            S3-4    1  E-   0         41-50      0         >200     0
                                                         S >5    0  I-   0          > 50      0        TOTAL    11      TOTAL        0

INFORMATION SYSTEMS        0-   0     0     0            Q1-2    0  L-   0 P-   0   1-10      1        1- 50     1       IN-DPT      0
 DESIGN (INTRODUCTORY)     1-   1     1     1            Q3-4    0  R-   1 D-   0  11-20      0       51-100     0      OUT-DPT      0
                           2-   0     0     0            Q >5    0  T-   0 S-   0  21-30      0      101-150     0
                           3-   0     0     0            S1-2    0  A-   0 C-   0  31-40      0      151-200     0
                           4-   0     0     0            S3-4    1  E-   0         41-50      0         >200     0
                                                         S >5    0  I-   0          > 50      0        TOTAL     8      TOTAL        0

MANAGEMENT INFORMATION     0-   0     0     0            Q1-2    0  L-   1 P-   0   1-10      0        1- 50     1       IN-DPT      0
 SYSTEMS                   1-   1     1     1            Q3-4    0  R-   0 D-   0  11-20      0       51-100     0      OUT-DPT      0
                           2-   0     0     0            Q >5    0  T-   0 S-   0  21-30      1      101-150     0
                           3-   0     0     0            S1-2    0  A-   0 C-   0  31-40      0      151-200     0
                           4-   0     0     0            S3-4    0  E-   0         41-50      0         >200     0
                                                         S >5    0  I-   0          > 50      0        TOTAL    29      TOTAL        0

MANAGEMENT OF COMPUTER     0-   1     1     0            Q1-2    0  L-   1 P-   0   1-10      1        1- 50     1       IN-DPT      0
 CENTERS OF INFORMATION    1-   0     0     1            Q3-4    1  R-   0 D-   0  11-20      0       51-100     0      OUT-DPT      0
  PROCESSING DEPARTMENTS   2-   0     0     0            Q >5    0  T-   0 S-   0  21-30      0      101-150     0
                           3-   0     0     0            S1-2    0  A-   0 C-   0  31-40      0      151-200     0
                           4-   0     0     0            S3-4    0  E-   0         41-50      0         >200     0
                                                         S >5    0  I-   0          > 50      0        TOTAL     0      TOTAL        0

COMPUTERS AND ACCOUNTING   0-   0     0     1            Q1-2    0  L-   0 P-   0   1-10      1        1- 50     1       IN-DPT      0
 (INCLUDING AUDITING)      1-   1     0     0            Q3-4    0  R-   1 D-   0  11-20      0       51-100     0      OUT-DPT      0
                           2-   0     1     0            Q >5    0  T-   0 S-   0  21-30      0      101-150     0
                           3-   0     0     0            S1-2    0  A-   0 C-   0  31-40      0      151-200     0
                           4-   0     0     0            S3-4    1  E-   0         41-50      0         >200     0
                                                         S >5    0  I-   0          > 50      0        TOTAL     7      TOTAL        0

OTHER                      0-   2     1     0            Q1-2    0  L-   0 P-   0   1-10      3        1- 50     4       IN-DPT      1
                           1-   1     2     2            Q3-4    1  R-   3 D-   0  11-20      1       51-100     0      OUT-DPT      0
                           2-   1     1     1            Q >5    0  T-   0 S-   0  21-30      0      101-150     0
                           3-   0     0     0            S1-2    1  A-   0 C-   1  31-40      0      151-200     0
                           4-   0     0     1            S3-4    1  E-   0         41-50      0         >200     0
                                                         S >5    0  I-   0          > 50      0        TOTAL    47      TOTAL        2

DESCRIPTION NOT CODED      0-   1     3     1            Q1-2    0  L-   5 P-   0   1-10      6        1- 50     6       IN-DPT      0
                           1-   3     1     3            Q3-4    0  R-   0 D-   0  11-20      0       51-100     0      OUT-DPT      0
                           2-   0     0     0            Q >5    0  T-   0 S-   0  21-30      0      101-150     0
                           3-   1     1     1            S1-2    5  A-   0 C-   1  31-40      0      151-200     0
                           4-   1     1     1            S3-4    1  E-   0         41-50      0         >200     0
                                                         S >5    0  I-   0          > 50      0        TOTAL    30      TOTAL        0
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                                          SUMMARY BY COURSE TYPE
    GROUP (            500-2499   )
                    NUMBER  OF  TERMS           CR HOURS                      **  AVERAGE ** *ENRCLLMENT* CCST COMPUTER SVCS
 COURSE DESCRIPTION      OFFERED                QTR AND                            SECT      * 1976-77  * 1976-77 (THOUS$)
                    76-77 77-78 78-79           SEMESTER    MCDE CF OPER      NO.  SIZE      * NO.  FREQ* ON AND OFF-CAMPUS

COMPUTER APPRECIATION  0-  11    10    10       Q1-2    5  L-  28 P-   0   1-10   21       1- 50   65        IN-DPT     31
                       1-  40    44    45       Q3-4   12  R-  56 D-   0  11-20   27      51-100   21       OUT-DPT     20
                       2-  30    27    25       Q >5    3  T-   0 S-   1  21-30   39     101-150    8
                       3-  18    18    18       S1-2   10  A-   3 C-   0  31-40    6     151-200    5
                       4-   5     5     6       S3-4   46  E-  15           41-50    3        >200    5
                                                S >5    2  I-   1            > 50    8       TOTAL  6344      TOTAL        51

PROBLEM SOLVING COURSE 0-   2     0     1       Q1-2    1  L-   1 P-   0   1-10    8       1- 50   14        IN-DPT      0
 IN THE HUMANITIES     1-  10    11    10       Q3-4    0  R-  14 D-   0  11-20    4      51-100    3       CUT-DPT     25
                       2-   4     5     6       Q >5    0  T-   0 S-   0  21-30    3     101-150    0
                       3-   1     1     0       S1-2    1  A-   0 C-   0  31-40    1     151-200    0
                       4-   0     0     0       S3-4   11  E-   1           41-50    1        >200    0
                                                S >5    0  I-   1            > 50    0       TOTAL   378      TOTAL        25

INTRODUCTORY COURSE IN 0-  43    25    31       Q1-2   34  L-  65 P-   3   1-10  115       1- 50  330        IN-DPT    249
 SOME COMPILER LANGUAGE 1- 206  213   210       Q3-4   81  R- 320 D-   0  11-20  151      51-100   68       OUT-CPT    144
 SUCH AS FORTRAN, PL/1, 2- 131  130   125       Q >5   29  T-   0 S-   1  21-30  122     101-150   24
 BASIC, ALGCL          3-  48    56    61       S1-2   36  A-   1 C-   0  31-40   40     151-200   17
                       4-  17    21    18       S3-4  190  E-  50           41-50   17        >200   10
                                                S >5    2  I-   9            > 50    4       TCTAL 20734      TOTAL       393

INTRODUCTCRY COURSE IN A 0- 34   23    16       Q1-2    7  L-  26 P-   0   1-10   82       1- 50  198        IN-DPT     74
 LANGUAGE SUCH AS COBOL 1- 133  139   143       Q3-4   38  R- 166 D-   0  11-20   78      51-100   10       OUT-DPT    103
                       2-  38    44    46       Q >5   21  T-   0 S-   0  21-30   46     101-150    4
                       3-  10     9    10       S1-2    7  A-   0 C-   0  31-40    5     151-200    1
                       4-   0     0     0       S3-4  122  E-  18           41-50    2        >200    2
                                                S >5    1  I-   5            > 50    2       TOTAL  5336      TOTAL       177

PROBLEM SOLVING COURSE 0-  16    18    11       Q1-2    7  L-  17 P-   2   1-10   52       1- 50  103        IN-DPT     19
 IN ENGINEERING OR     1-  76    75    83       Q3-4   14  R-  85 D-   0  11-20   37      51-100   10       CUT-CPT      3
 SCIENTIFIC APPLI-     2-  15    14    12       Q >5    2  T-   0 S-   0  21-30   18     101-150    1
 CATIONS               3-   7     8     9       S1-2    7  A-   9 C-   0  31-40    4     151-200    1
                       4-   2     1     1       S3-4   55  E-   2           41-50    3        >200    1
                                                S >5    3  I-   1            > 50    2       TOTAL  2642      TOTAL        22

INTRODUCTORY COURSE IN 0-   4     7    12       Q1-2    1  L-  11 P-   2   1-10   39       1- 50  106        IN-DPT     76
 PROGRAMMING           1-  68    70    68       Q3-4   31  R- 113 D-   0  11-20   46      51-100   26       OUT-DPT     53
                       2-  55    49    43       Q >5   16  T-   0 S-   0  21-30   39     101-150    8
                       3-  15    15    17       S1-2    9  A-   1 C-   0  31-40   14     151-200    4
                       4-   3     4     5       S3-4   61  E-  17           41-50    4        >200    1
                                                S >5    3  I-   1            > 50    3       TOTAL  6163      TOTAL       129

ADVANCED COURSE IN     0-  34    26    26       Q1-2    9  L-  26 P-   9   1-10  148       1- 50  266        IN-DPT    119
 PROGRAMMING           1- 173   182   181       Q3-4   55  R- 194 D-   0  11-20   98      51-100    7       OUT-DPT     93
                       2-  60    54    54       Q >5   39  T-   0 S-   3  21-30   22     101-150    2
                       3-   5     9     5       S1-2    4  A-   1 C-   0  31-40    4     151-200    0
                       4-   3     4     9       S3-4  138  E-  26           41-50    1        >200    0
                                                S >5    5  I-  16            > 50    2       TOTAL  4495      TOTAL       212

FIRST COURSE IN COMPUTER 0-  4     4     2      Q1-2    0  L-   4 P-   1   1-10   19       1- 50   31        IN-DPT     17
 DESIGN                1-  25    26    27       Q3-4    7  R-  26 D-   0  11-20    9      51-100    1       OUT-DPT     13
                       2-   3     3     4       Q >5    4  T-   0 S-   0  21-30    1     101-150    1
                       3-   1     0     0       S1-2    3  A-   0 C-   0  31-40    2     151-200    0
                       4-   0     0     0       S3-4   11  E-   2           41-50    0        >200    0
                                                S >5    0  I-   0            > 50    2       TOTAL   626      TOTAL        30

ADVANCED COURSE IN COM- 0-   3     1     2      Q1-2    0  L-   6 P-   1   1-10   11       1- 50   17        IN-DPT     13
 PUTER DESIGN (COMPUTER 1-  10    12    10      Q3-4    5  R-   8 D-   0  11-20    4      51-100    0       OUT-DPT     18
 ARCHITECTURE)         2-   2     2     3       Q >5    2  T-   0 S-   0  21-30    1     101-150    0
                       3-   2     2     2       S1-2    1  A-   0 C-   0  31-40    1     151-200    0
                       4-   0     0     0       S3-4    5  E-   1           41-50    0        >200    0
                                                S >5    0  I-   1            > 50    0       TOTAL   201      TOTAL        31

PROGRAMMING LANGUAGES  0-  19    14    16       Q1-2    1  L-  17 P-   1   1-10   31       1- 50   59        IN-CPT     31
 (STRUCTURE, ETC.)     1-  39    41    39       Q3-4    8  R-  38 D-   0  11-20   24      51-100    1       OUT-DPT     27
                       2-   1     4     5       Q >5    5  T-   0 S-   1  21-30    4     101-150    0
                       3-   1     1     0       S1-2    3  A-   0 C-   0  31-40    1     151-200    0
                       4-   0     0     0       S3-4   32  E-   1           41-50    0        >200    0
                                                S >5    0  I-   2            > 50    0       TOTAL   602      TOTAL        58

OPERATING SYSTEMS      0-  18    14    13       Q1-2    3  L-  17 P-   2   1-10   43       1- 50   78        IN-DPT     33
 (SYSTEMS PROGRAMMING, 1-  52    56    56       Q3-4   15  R-  51 D-   0  11-20   23      51-100    2       OUT-DPT     24
 ETC.)                 2-   9     9    10       Q >5    4  T-   0 S-   1  21-30   11     101-150    0
                       3-   1     1     0       S1-2    3  A-   0 C-   0  31-40    3     151-200    0
                       4-   0     0     1       S3-4   45  E-   8           41-50    0        >200    0
                                                S >5    0  I-   1            > 50    0       TOTAL  1227      TOTAL        58

DATA STRUCTURES        0-  21    13    18       Q1-2    5  L-  12 P-   1   1-10   38       1- 50   62        IN-DPT      3
                       1-  39    47    42       Q3-4    9  R-  47 D-   0  11-20   15      51-100    1       OUT-CPT      5
                       2-   2     3     2       Q >5    3  T-   0 S-   0  21-30    9     101-150    0
                       3-   1     0     1       S1-2    0  A-   2 C-   0  31-40    1     151-200    0
                       4-   0     0     0       S3-4   36  E-   1           41-50    0        >200    0
                                                S >5    0  I-   0            > 50    0       TOTAL   739      TOTAL         9
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SUMMARY BY COURSE TYPE
GROUP (500-2499) CONTINUED

COURSE DESCRIPTION	NUMBER OF TERMS OFFERED	76-77	77-78	73-79	CR HCURS QTR AND SEMESTER		MODE OF OPER				** AVERAGE ** NO.	SECT SIZE	*ENROLLMENT* * 1976-77 * NO.	FREQ*	COST COMPUTER SVCS * 1976-77 (THOUS$) ON AND OFF-CAMPUS	
AUTOMATA THEOKY	0-	1	3	0	Q1-2	0	L-	2	P-	0	1-10	2	1- 50	3	IN-DPT	1
	1-	2	0	3	Q3-4	1	R-	1	D-	0	11-20	0	51-100	0	OUT-DPT	0
	2-	0	0	0	Q >5	0	T-	0	S-	0	21-30	0	101-150	0		
	3-	0	0	0	S1-2	0	A-	0	C-	0	31-40	1	151-200	0		
	4-	0	0	0	S3-4	2	E-	0			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	41	TOTAL	1
SIMULATION APPLICATIONS	0-	4	1	3	Q1-2	0	L-	4	P-	1	1-10	10	1- 50	17	IN-DPT	2
(NON-ECONCMETRIC)	1-	13	15	13	Q3-4	3	R-	10	D-	0	11-20	4	51-100	0	CUT-DPT	0
	2-	0	1	1	Q >5	1	T-	0	S-	1	21-30	1	101-150	0		
	3-	0	0	0	S1-2	0	A-	0	C-	0	31-40	2	151-200	0		
	4-	0	0	0	S3-4	12	E-	0			41-50	0	>200	0		
					S >5	0	I-	1			> 50	0	TOTAL	208	TOTAL	2
SIMULATICN LANGUAGES	0-	5	7	8	Q1-2	1	L-	4	P-	0	1-10	11	1- 50	16	IN-DPT	0
AND/OR TECHNIQUES	1-	10	8	8	Q3-4	0	R-	12	C-	0	11-20	4	51-100	0	OUT-DPT	0
	2-	1	0	0	Q >5	1	T-	0	S-	0	21-30	1	101-150	0		
	3-	0	1	0	S1-2	2	A-	0	C-	0	31-40	0	151-200	0		
	4-	C	0	0	S3-4	9	E-	0			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TCTAL	120	TOTAL	0
ARTIFICIAL INTELLIGENCE	0-	3	1	1	Q1-2	0	L-	2	P-	0	1-10	3	1- 50	4	IN-DPT	0
(HEURISTIC PROGRAMMING)	1-	1	3	3	Q3-4	0	R-	2	D-	0	11-20	1	51-100	0	OUT-DPT	3
	2-	0	0	0	Q >5	1	T-	0	S-	0	21-30	0	101-150	0		
	3-	0	0	0	S1-2	0	A-	0	C-	0	31-40	0	151-200	0		
	4-	0	0	0	S3-4	3	E-	G			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	14	TOTAL	3
HYBRID COMPUTERS	0-	2	2	0	Q1-2	0	L-	2	P-	0	1-10	2	1- 50	2	IN-DPT	0
	1-	0	0	2	Q3-4	0	R-	0	D-	0	11-20	0	51-100	0	OUT-DPT	0
	2-	0	0	0	Q >5	0	T-	0	S-	0	21-30	0	101-150	0		
	3-	0	0	0	S1-2	0	A-	0	C-	0	31-40	0	151-200	0		
	4-	0	0	0	S3-4	2	E-	0			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	0	TOTAL	0
DISCRETE STRUCTURES	0-	7	7	6	Q1-2	0	L-	7	P-	0	1-10	12	1- 50	15	IN-DPT	0
	1-	8	8	9	Q3-4	0	R-	8	D-	0	11-20	2	51-100	0	OUT-DPT	10
	2-	0	0	0	Q >5	1	T-	0	S-	0	21-30	1	101-15C	0		
	3-	0	0	0	S1-2	1	A-	0	C-	0	31-40	0	151-200	0		
	4-	0	0	0	S3-4	7	E-	0			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	87	TOTAL	10
COMPUTER ORGANIZATION	0-	10	8	4	Q1-2	3	L-	2	P-	0	1-10	13	1- 50	26	IN-DPT	0
	1-	16	16	20	Q3-4	3	R-	22	D-	0	11-20	10	51-100	0	OUT-DPT	1
	2-	0	2	2	Q >5	2	T-	1	S-	0	21-30	3	101-150	0		
	3-	0	0	0	S1-2	1	A-	1	C-	0	31-40	0	151-200	0		
	4-	0	0	0	S3-4	16	E-	0			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	231	TOTAL	1
SWITCHING THECRY	0-	2	1	1	Q1-2	0	L-	2	P-	0	1-10	1	1- 50	4	IN-DPT	0
	1-	2	3	3	Q3-4	0	R-	2	C-	0	11-20	2	51-100	0	OUT-DPT	0
	2-	0	0	0	Q >5	0	T-	0	S-	0	21-30	1	101-150	0		
	3-	0	0	0	S1-2	0	A-	0	C-	0	31-40	0	151-200	0		
	4-	0	0	0	S3-4	4	E-	0			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TCTAL	35	TOTAL	0
COMPILER CONSTRUCTION	0-	5	8	3	Q1-2	0	L-	7	P-	1	1-10	16	1- 50	21	IN-DPT	0
	1-	16	13	18	Q3-4	3	R-	13	D-	0	11-20	3	51-100	0	OUT-DPT	0
	2-	0	0	0	Q >5	1	T-	0	S-	0	21-30	2	101-150	0		
	3-	0	0	0	S1-2	2	A-	0	C-	0	31-40	0	151-20C	0		
	4-	0	0	0	S3-4	10	E-	0			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	162	TOTAL	0
FORMAL LANGUAGES AND	0-	2	4	0	Q1-2	1	L-	5	P-	0	1-10	6	1- 50	9	IN-DPT	0
SYNTACTIC ANALYSIS	1-	5	4	7	Q3-4	4	R-	3	D-	0	11-20	3	51-100	0	OUT-DPT	0
	2-	2	1	2	Q >5	1	T-	0	S-	0	21-30	0	101-150	0		
	3-	0	0	0	S1-2	0	A-	1	C-	0	31-40	0	151-200	0		
	4-	0	0	0	S3-4	3	E-	0			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	95	TOTAL	0
INTRODUCTORY COMPUTER	0-	9	5	7	Q1-2	0	L-	14	P-	0	1-10	16	1- 50	34	IN-DPT	2
ORGANIZATICN	1-	17	21	20	Q3-4	11	R-	13	C-	0	11-20	12	51-100	0	OUT-DPT	3
	2-	7	8	7	Q >5	1	T-	0	S-	0	21-30	3	101-150	0		
	3-	1	0	0	S1-2	0	A-	0	C-	0	31-40	2	151-200	0		
	4-	0	0	0	S3-4	13	E-	7			41-50	1	>200	0		
					S >5	0	I-	0			> 50	0	TCTAL	554	TOTAL	6
ADVANCED CCMPUTER	0-	2	1	2	Q1-2	1	L-	2	P-	0	1-10	3	1- 5C	6	IN-CPT	0
ORGANIZATION	1-	4	5	4	Q3-4	2	R-	4	C-	0	11-20	3	51-100	0	OUT-DPT	0
	2-	0	0	0	Q >5	0	T-	0	S-	0	21-30	0	101-150	0		
	3-	0	0	0	S1-2	0	A-	0	C-	0	31-40	0	151-200	0		
	4-	0	0	0	S3-4	3	E-	0			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	79	TOTAL	0

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                                           SUMMARY BY COURSE TYPE
     GROUP (           500-2499   )         CONTINUED
                      NUMBER  OF  TERMS          CR HOURS                          **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
                            OFFERED              QTR AND                                   SECT     * 1976-77   * 1976-77 (THOUS$)
   COURSE DESCRIPTION                            SEMESTER    MODE OF OPER        NO.   SIZE     * NO.  FREQ* ON AND OFF-CAMPUS
                        76-77 77-78 78-79

  INFORMATION STORAGE   0-   3     0     1       Q1-2    0  L-   3 P-   0   1-10    5       1- 50     9       IN-DPT      0
   AND RETRIEVAL        1-   4     7     5       Q3-4    2  R-   5 D-   0  11-20    1      51-100     0       OUT-DPT     0
                        2-   2     2     3       Q >5    1  T-   0 S-   0  21-30    2     101-150     0
                        3-   0     0     0       S1-2    0  A-   0 C-   0  31-40    1     151-200     0
                        4-   0     0     0       S3-4    4  E-   1          41-50    0        >200     0
                                                 S >5    0  I-   0           > 50    0       TOTAL   138       TOTAL       0

  COMPUTER GRAPHICS     0-   1     3     0       Q1-2    0  L-   2 P-   0   1-10    5       1- 50     7       IN-DPT      0
                        1-   5     3     6       Q3-4    0  R-   4 C-   0  11-20    2      51-100     0       OUT-DPT     1
                        2-   0     0     0       Q >5    0  T-   0 S-   0  21-30    0     101-150     0
                        3-   1     1     1       S1-2    0  A-   0 C-   0  31-40    0     151-200     0
                        4-   0     0     0       S3-4    5  E-   0          41-50    0        >200     0
                                                 S >5    0  I-   1           > 50    0       TOTAL    43       TOTAL       1

  COMPUTABILITY         0-   2     1     1       Q1-2    1  L-   6 P-   0   1-10    4       1- 50     6       IN-DPT      0
                        1-   3     4     4       Q3-4    0  R-   0 D-   0  11-20    2      51-100     0       OUT-DPT     0
                        2-   1     1     1       Q >5    1  T-   0 S-   0  21-30    0     101-150     0
                        3-   0     0     0       S1-2    1  A-   0 C-   0  31-40    0     151-200     0
                        4-   0     0     0       S3-4    3  E-   0          41-50    0        >200     0
                                                 S >5    0  I-   0           > 50    0       TOTAL    70       TOTAL       0

  INTRODUCTORY NUMERICAL 0-  25    27    21      Q1-2    4  L-  32 P-   0   1-10   61       1- 50    93       IN-DPT      9
   ANALYSIS (OR METHODS) 1-  61    58    65      Q3-4    3  R-  54 D-   0  11-20   27      51-100     0       OUT-DPT     1
                        2-   7     8     7       Q >5    2  T-   0 S-   1  21-30    5     101-150     0
                        3-   0     0     0       S1-2    0  A-   1 C-   0  31-40    0     151-200     0
                        4-   0     0     0       S3-4   56  E-   2          41-50    0        >200     0
                                                 S >5    0  I-   3           > 50    0       TOTAL   879       TOTAL       9

  ADVANCED NUMERICAL    0-   3     6     3       Q1-2    1  L-   9 P-   0   1-10   17       1- 50    25       IN-DPT      2
   ANALYSIS             1-  18    15    18       Q3-4    0  R-  15 C-   0  11-20    3      51-100     0       OUT-DPT     6
                        2-   4     4     4       Q >5    0  T-   0 S-   1  21-30    5     101-150     0
                        3-   0     0     0       S1-2    4  A-   0 C-   0  31-40    0     151-200     0
                        4-   0     0     0       S3-4   12  E-   0          41-50    0        >200     0
                                                 S >5    2  I-   0           > 50    0       TOTAL   363       TOTAL       8

  INTRODUCTORY OPERATIONS 0-  6     5     5      Q1-2    3  L-   9 P-   0   1-10    8       1- 50    22       IN-DPT      0
   RESEARCH             1-  13    14    14       Q3-4    2  R-   7 D-   0  11-20   10      51-100     0       OUT-DPT     0
                        2-   3     3     3       Q >5    2  T-   0 S-   0  21-30    3     101-150     0
                        3-   0     0     0       S1-2    2  A-   2 C-   0  31-40    1     151-200     0
                        4-   0     0     0       S3-4   12  E-   3          41-50    0        >200     0
                                                 S >5    0  I-   1           > 50    0       TOTAL   335       TOTAL       0

  ADVANCED OPERATIONS . 0-   2     4     5       Q1-2    2  L-   4 P-   1   1-10    5       1- 50    10       IN-DPT      3
   RESEARCH             1-   7     6     5       Q3-4    0  R-   3 D-   0  11-20    4      51-100     0       OUT-DPT     0
                        2-   1     0     0       Q >5    0  T-   0 S-   0  21-30    0     101-150     0
                        3-   0     0     0       S1-2    5  A-   2 C-   0  31-40    1     151-200     0
                        4-   0     0     0       S3-4    3  E-   0          41-50    0        >200     0
                                                 S >5    0  I-   0           > 50    0       TOTAL   154       TOTAL       3

  DATA COMMUNICATIONS   0-   3     3     2       Q1-2    0  L-   6 P-   0   1-10    5       1- 50    11       IN-DPT      9
                        1-   8     8     9       Q3-4    0  R-   4 D-   0  11-20    6      51-100     1       OUT-DPT     0
                        2-   1     1     1       Q >5    1  T-   0 S-   0  21-30    1     101-150     0
                        3-   0     0     0       S1-2    0  A-   0 C-   0  31-40    0     151-200     0
                        4-   0     0     0       S3-4    5  E-   1          41-50    0        >200     0
                                                 S >5    0  I-   1           > 50    0       TOTAL   232       TOTAL       9

  PROCESS CONTROL       0-   1     1     1       Q1-2    0  L-   1 P-   0   1-10    1       1- 50     5       IN-DPT     16
                        1-   2     2     2       Q3-4    1  P-   4 D-   0  11-20    3      51-100     0       OUT-DPT    12
                        2-   1     2     2       Q >5    0  T-   0 S-   0  21-30    1     101-150     0
                        3-   1     0     0       S1-2    1  A-   0 C-   0  31-40    0     151-200     0
                        4-   0     0     0       S3-4    3  E-   0          41-50    0        >200     0
                                                 S >5    0  I-   0           > 50    0       TOTAL   102       TOTAL      28

  DATA PREPARATION (KEY 0-   2     2     1       Q1-2    3  L-   3 P-   8   1-10   18       1- 50    38       IN-DPT     40
   PUNCH, VERIFIER, DATA 1- 16    15    16       Q3-4   16  R-  22 D-   0  11-20   15      51-100     2       OUT-DPT    31
   ENTRY,...)           2-  12    12    11       Q >5    0  T-   1 S-   0  21-30    6     101-150     1
                        3-   4     6     6       S1-2    9  A-   0 C-   0  31-40    2     151-200     0
                        4-   7     6     7       S3-4   11  E-   1          41-50    0        >200     0
                                                 S >5    1  I-   6           > 50    0       TOTAL  1199       TOTAL      71

  UNIT RECORD (EAM)     0-   1     2     3       Q1-2    0  L-   5 P-   1   1-10    3       1- 50    11       IN-DPT     12
                        1-   7     7     5       Q3-4    2  R-   4 D-   0  11-20    3      51-100     0       OUT-DPT    12
                        2-   2     2     3       Q >5    1  T-   0 S-   0  21-30    4     101-150     0
                        3-   1     0     0       S1-2    1  A-   0 C-   0  31-40    1     151-200     0
                        4-   0     0     0       S3-4    2  E-   1          41-50    0        >200     0
                                                 S >5    0  I-   0           > 50    0       TOTAL   242       TOTAL      24

   INTRODUCTORY COURSE  0-   6     2     4       Q1-2    2  L-  41 P-   1   1-10   18       1- 50    80       IN-DPT     43
    IN DATA PROCESSING  1-  52    57    51       Q3-4   45  R-  78 D-   0  11-20   49      51-100    36       OUT-DPT    47
                        2-  51    48    52       Q >5   12  T-   0 S-   0  21-30   54     101-150    15
                        3-  24    25    25       S1-2    3  A-  14 C-   0  31-40   23     151-200    10
                        4-  15    16    16       S3-4   69  E-  15          41-50    4        >200     9
                                                 S >5    4  I-   1           > 50    2       TOTAL 11100       TOTAL      90
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                                                   SUMMARY BY COURSE TYPE
   GROUP (              500-2499   )               CONTINUED
                       NUMBER  OF  TERMS              CR HOURS                          **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTION         OFFERED                   QTR AND                                SECT      * 1976-77  * 1976-77 (THOUS$)
                       76-77 77-78 78-79              SEMESTER   MODE OF OPER         NO.    SIZE      * NO.   FREQ* ON AND OFF-CAMPUS

ADVANCED COURSE IN DATA  0-   2     2     1           Q1-2     0  L-   5 P-  2    1-10     9        1- 50   20       IN-DPT      2
 PROCESSING              1-  10     9    11           Q3-4     8  R-  15 C-  0   11-20     7       51-100    3      OUT-DPT      1
                         2-   8     8     6           Q >5     0  T-   0 S-  0   21-30     7      101-150    0
                         3-   3     4     3           S1-2     4  A-   0 C-  0   31-40     0      151-200    0
                         4-   0     0     2           S3-4    10  E-   0         41-50     0         >200    0
                                                      S >5     0  I-   1          > 50     0        TOTAL  576       TOTAL       3

PROBLEM SOLVING COURSE   0-   8     4     3           Q1-2     2  L-  14 P-  6    1-10    24        1- 50   44       IN-DPT      9
 IN BUSINESS APPLI-      1-  26    29    30           Q3-4    15  R-  22 D-  0   11-20    15       51-100    2      OUT-DPT      9
 CATIONS                 2-  11    12    12           Q >5     6  T-   0 S-  0   21-30     6      101-150    1
                         3-   2     2     2           S1-2     5  A-   1 C-  0   31-40     3      151-200    1
                         4-   1     1     1           S3-4    14  E-   3         41-50     0         >200    0
                                                      S >5     0  I-   2          > 50     0        TOTAL 1173       TOTAL      19

ADVANCED BUSINESS APPLI- 0-   1     2     0           Q1-2     2  L-   6 P-  3    1-10    11        1- 50   22       IN-DPT     10
 CATIONS (MARKETING,     1-  19    19    18           Q3-4     5  R-  14 D-  0   11-20     9       51-100    2      OUT-DPT      8
 FINANCE, PRODUCTION,    2-   4     3     6           Q >5     7  T-   0 S-  0   21-30     3      101-150    1
 ETC.)                   3-   1     1     1           S1-2     0  A-   0 C-  1   31-40     1      151-200    0
                         4-   0     0     0           S3-4    10  E-   1         41-50     1         >200    0
                                                      S >5     1  I-   0          > 50     0        TOTAL  639       TOTAL      18

INTRODUCTORY SYSTEMS     0-  11     6    11           Q1-2     2  L-  11 P-  0    1-10    25        1- 50   59       IN-DPT      4
 ANALYSIS (BUSINESS)     1-  43    48    43           Q3-4    19  R-  38 C-  0   11-20    28       51-100    2      OUT-DPT      1
                         2-   6     5     5           Q >5     8  T-   0 S-  2   21-30     8      101-150    0
                         3-   1     2     1           S1-2     0  A-   7 C-  0   31-40     0      151-200    0
                         4-   0     0     1           S3-4    29  E-   2         41-50     0         >200    0
                                                      S >5     2  I-   1          > 50     0        TOTAL 1077       TOTAL       5

LARGE SCALE INFORMATION  0-   3     1     2           Q1-2     0  L-   2 P-  0    1-10     4        1- 50    6       IN-DPT      1
 PROCESSING SYSTEMS      1-   3     5     4           Q3-4     2  R-   5 D-  0   11-20     1       51-100    1      OUT-DPT      0
                         2-   1     0     0           Q >5     1  T-   0 S-  0   21-30     2      101-150    0
                         3-   0     1     0           S1-2     0  A-   0 C-  0   31-40     0      151-200    0
                         4-   0     0     1           S3-4     4  E-   0         41-50     0         >200    0
                                                      S >5     0  I-   0          > 50     0        TOTAL  112       TOTAL       1

FILE ORGANIZATION        0-   3     0     1           Q1-2     0  L-   1 P-  0    1-10     3        1- 50    6       IN-DPT      0
                         1-   2     5     4           Q3-4     3  R-   3 D-  0   11-20     2       51-100    0      OUT-DPT      0
                         2-   1     1     1           Q >5     0  T-   0 S-  0   21-30     1      101-150    0
                         3-   0     0     0           S1-2     1  A-   1 C-  0   31-40     0      151-200    0
                         4-   0     0     0           S3-4     2  E-   1         41-50     0         >200    0
                                                      S >5     0  I-   0          > 50     0        TOTAL   84       TOTAL       0

DATA BASE MANAGEMENT     0-   4     3     1           Q1-2     1  L-   3 P-  0    1-10     5        1- 50    9       IN-DPT      0
                         1-   3     4     6           Q3-4     2  R-   5 C-  0   11-20     4       51-100    0      OUT-DPT      0
                         2-   2     2     2           Q >5     2  T-   0 S-  0   21-30     0      101-150    0
                         3-   0     0     0           S1-2     1  A-   0 C-  0   31-40     0      151-200    0
                         4-   0     0     0           S3-4     3  E-   1         41-50     0         >200    0
                                                      S >5     0  I-   0          > 50     0        TOTAL  110       TOTAL       0

INFORMATION SYSTEMS      0-   8     5     4           Q1-2     3  L-   9 P-  1    1-10    25        1- 50   42       IN-DPT      7
 DESIGN (INTRODUCTORY)   1-  31    33    36           Q3-4    10  R-  21 D-  1   11-20    12       51-100    0      OUT-DPT      0
                         2-   2     3     1           Q >5     3  T-   0 S-  0   21-30     4      101-150    0
                         3-   1     1     1           S1-2     3  A-   4 C-  0   31-40     1      151-200    0
                         4-   0     0     0           S3-4    21  E-   6         41-50     0         >200    0
                                                      S >5     1  I-   0          > 50     0        TOTAL  528       TOTAL       8

INFORMATION SYSTEMS      0-   4     5     2           Q1-2     2  L-   9 P-  1    1-10    15        1- 50   26       IN-DPT      3
 DESIGN (ADVANCED)       1-  19    17    20           Q3-4     6  R-  10 D-  0   11-20     8       51-100    0      OUT-DPT      0
                         2-   3     4     3           Q >5     2  T-   0 S-  0   21-30     3      101-150    0
                         3-   0     0     1           S1-2     1  A-   2 C-  0   31-40     0      151-200    0
                         4-   0     0     0           S3-4    15  E-   2         41-50     0         >200    0
                                                      S >5     0  I-   2          > 50     0        TOTAL  354       TOTAL       3

MANAGEMENT INFORMATION   0-   6     3     3           Q1-2     1  L-   6 P-  0    1-10     5        1- 50   17       IN-DPT      0
 SYSTEMS                 1-   9    11    11           Q3-4     2  R-   7 D-  0   11-20     8       51-100    0      OUT-DPT      0
                         2-   2     3     3           Q >5     0  T-   0 S-  1   21-30     2      101-150    0
                         3-   0     0     0           S1-2     0  A-   1 C-  0   31-40     1      151-200    0
                         4-   0     0     0           S3-4    13  E-   2         41-50     1         >200    0
                                                      S >5     0  I-   0          > 50     0        TOTAL  267       TOTAL       0

MANAGEMENT OF COMPUTER   0-   3     2     1           Q1-2     0  L-   2 P-  1    1-10     7        1- 50    8       IN-DPT      0
 CENTERS OF INFORMATION  1-   4     6     7           Q3-4     1  R-   1 D-  0   11-20     1       51-100    0      OUT-DPT      0
  PROCESSING DEPARTMENTS 2-   1     0     0           Q >5     0  T-   0 S-  1   21-30     0      101-150    0
                         3-   0     0     0           S1-2     1  A-   2 C-  0   31-40     0      151-200    0
                         4-   0     0     0           S3-4     5  E-   0         41-50     0         >200    0
                                                      S >5     0  I-   1          > 50     0        TOTAL   33       TOTAL       0

COMPUTERS AND ACCOUNTING 0-   0     1     1           Q1-2     1  L-   1 P-  0    1-10     1        1- 50    8       IN-DPT      0
 (INCLUDING AUDITING)    1-   4     3     3           Q3-4     3  R-   3 D-  0   11-20     5       51-100    0      OUT-DPT      0
                         2-   4     4     4           Q >5     0  T-   0 S-  0   21-30     2      101-150    0
                         3-   0     0     0           S1-2     0  A-   0 C-  1   31-40     0      151-200    0
                         4-   0     0     0           S3-4     2  E-   3         41-50     0         >200    0
                                                      S >5     0  I-   0          > 50     0        TOTAL  203       TOTAL       0
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                                             SUMMARY BY CCURSE TYPE
   GROUP (              500-2499   )          CONTINUED
                       NUMBER  OF  TERMS              CR HOURS                             **  AVERAGE ** *ENRCLLMENT* CCST COMPUTER SVCS
 COURSE DESCRIPTION        OFFERED                    QTR AND                                    SECT      * 1976-77   * 1976-77 (THOUS$)
                        76-77 77-78 78-79             SEMESTER     MODE CF OPER          NO.     SIZE      * NO.  FREQ* ON AND OFF-CAMPUS

ECONOMETRIC SIMULATION  0-    0     1     1           Q1-2     0  L-    2 P-    0   1-10     3         1- 50     7        IN-DPT      3
 APPLICATIONS           1-    4     3     3           Q3-4     1  R-    5 D-    0  11-20     3        51-100     1       OUT-DPT      0
                        2-    5     5     5           Q >5     0  T-    0 S-    1  21-30     3       101-150     0
                        3-    0     0     0           S1-2     0  A-    0 C-    0  31-40     0       151-20C     1
                        4-    0     0     0           S3-4     7  E-    1            41-50     0          >200     0
                                                      S >5     0  I-    0             > 50     0        TCTAL    397       TOTAL         3

INSTRUCTIONAL DESIGN    0-    0     0     0           Q1-2     0  L-    0 P-    1   1-10     4         1- 50     4        IN-DPT      0
                        1-    3     3     3           Q3-4     3  R-    3 D-    0  11-20     0        51-100     0       CUT-DPT      0
                        2-    1     1     1           Q >5     0  T-    0 S-    0  21-30     0       101-150     0
                        3-    C     0     0           S1-2     0  A-    0 C-    0  31-40     0       151-200     0
                        4-    0     0     0           S3-4     1  E-    0            41-50     0          >200     0
                                                      S >5     0  I-    0             > 50     0         TOTAL    17       TOTAL         0

COMPUTER BASEC          0-    1     2     2           Q1-2     0  L-    0 P-    0   1-10     4         1- 50     5        IN-DPT      1
INSTRUCTION             1-    4     3     3           Q3-4     2  R-    5 D-    0  11-20     1        51-100     0       CUT-DPT      0
                        2-    0     0     0           Q >5     1  T-    0 S-    0  21-30     0       101-150     0
                        3-    0     0     0           S1-2     2  A-    0 C-    0  31-40     0       151-200     0
                        4-    0     0     0           S3-4     0  E-    0            41-50     0          >200     0
                                                      S >5     0  I-    0             > 50     0         TCTAL    51       TOTAL         1

OTHER                   0-   22    19    14           Q1-2    11  L-   39 P-    6   1-10   112         1- 50   160        IN-DPT      6
                        1-   97    98   101           Q3-4    14  R-   62 D-    2  11-20    38        51-100     3       OUT-DPT      7
                        2-   26    28    31           Q >5    10  T-    0 S-   13  21-30    10       101-150     4
                        3-   19    19    18           S1-2    23  A-    2 C-    0  31-40     3       151-200     0
                        4-    3     3     3           S3-4    80  E-    5            41-50     2          >200     0
                                                      S >5     3  I-   38             > 50     2        TCTAL   2507       TOTAL        14

DESCRIPTION NOT CODED   0-    7     9    11           Q1-2     0  L-   81 P-    0   1-10    53         1- 50    73        IN-DPT     13
                        1-   68    64    64           Q3-4    17  R-    7 D-    0  11-20     8        51-100    11       OUT-CPT     13
                        2-    7    10     9           Q >5     6  T-    0 S-    2  21-30    22       101-150     1
                        3-    8     6     6           S1-2    26  A-    0 C-    0  31-40     3       151-200     5
                        4-    0     1     0           S3-4    35  E-    0            41-50     2          >200     0
                                                      S >5     3  I-    0             > 50     2         TOTAL  3103       TOTAL        26
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                                                    SUMMARY BY CCURSE TYPE
       GROUP (             2500-9999  )
                          NUMBER  OF  TERMS        CR HOURS                                 **  AVERAGE ** *ENRCLLMENT* CCST COMPUTER SVCS
    COURSE DESCRIPTION         OFFERED             QTR AND                                       SECT      * 1976-77  * 1976-77 (THOUS$)
                         76-77 77-78 78-79         SEMESTER    MODE OF OPER          NO.         SIZE      * NO.  FREQ* ON AND OFF-CAMPUS

COMPUTER APPRECIATION     0-   8    10    11       Q1-2     3  L-  53 P-   6   1-10   18         1- 50    64       IN-DPT     69
                          1-  36    36    36       Q3-4    21  R-  46 D-   0  11-20   26        51-100    33      OUT-DPT     30
                          2-  50    48    45       Q >5     2  T-   1 S-   2  21-30   60       101-150    10
                          3-  28    29    30       S1-2    20  A-  11 C-   1  31-40   15       151-200     4
                          4-   8     6     8       S3-4    72  E-   9         41-50    4          >200    20
                                                   S >5     0  I-   2          > 50    8         TOTAL 13640       TOTAL      99

PROBLEM SOLVING COURSE    0-  16    22    27       Q1-2     0  L-  16 P-   0   1-10   34         1- 50    69       IN-DPT     32
 IN THE HUMANITIES        1-  51    42    35       Q3-4     3  R-  18 D-   3  11-20   26        51-100    10      CUT-CPT      2
                          2-  14    17    19       Q >5     1  T-   0 S-   2  21-30   16       101-150     3
                          3-   6     6     6       S1-2     2  A-  23 C-  25  31-40    7       151-200     0
                          4-   0     0     0       S3-4    78  E-   0         41-50    1          >200     5
                                                   S >5     1  I-   0          > 50    3         TOTAL  3625       TOTAL      34

INTRODUCTORY COURSE IN    0-  29    22    30       Q1-2    21  L- 118 P-  14   1-10   51         1- 50   301       IN-DPT    428
 SOME COMPILER LANGUAGE   1- 189   188   180       Q3-4    95  R- 396 D-   0  11-20  199        51-100   121      OUT-DPT    315
 SUCH AS FORTRAN, PL/1,   2- 183   188   186       Q >5    28  T-   2 S-   0  21-30  201       101-150    63
 BASIC, ALGCL             3- 136   135   137       S1-2    84  A-   9 C-   0  31-40   76       151-200    35
                          4-  39    42    43       S3-4   309  E-  35         41-50   24          >200    59
                                                   S >5     3  I-   5          > 50   28         TOTAL 56356       TOTAL     742

INTRODUCTORY COURSE IN A  0-  13     8    11       Q1-2     4  L-  48 P-   3   1-10   42         1- 50   189       IN-DPT    118
 LANGUAGE SUCH AS COBOL   1- 135   128   124       Q3-4    73  R- 242 D-   0  11-20  136        51-100    82      OUT-DPT    120
                          2- 112   122   119       Q >5    13  T-   1 S-   0  21-30  118       101-150    39
                          3-  57    59    63       S1-2    20  A-   6 C-   0  31-40   28       151-20C    14
                          4-  18    18    18       S3-4   211  E-  34         41-50   10          >200    12
                                                   S >5     1  I-   2          > 50    2         TCTAL 21021       TOTAL     238

PROBLEM SOLVING COURSE    0-  24    55    61       Q1-2     4  L-  38 P-   0   1-10   73         1- 50   171       IN-DPT    112
 IN ENGINEERING OR        1- 120    92    87       Q3-4    17  R- 101 D-  16  11-20   77        51-100    29      CUT-DPT     42
 SCIENTIFIC APPLI-        2-  43    44    41       Q >5     0  T-   1 S-   0  21-30   32       101-150     5
 CATIONS                  3-  18    13    15       S1-2    10  A-  15 C-   0  31-40   25       151-200     1
                          4-   5     6     6       S3-4   171  E-   9         41-50    1          >200     4
                                                   S >5     2  I-  30          > 50    2         TOTAL  6830       TOTAL     154

INTRODUCTORY COURSE IN    0-  11     6     8       Q1-2     2  L-  37 P-   0   1-10   23         1- 50    96       IN-DPT    142
 PROGRAMMING              1-  63    61    56       Q3-4    40  R- 144 D-   0  11-20   62        51-100    52      OUT-DPT    205
                          2-  77    78    80       Q >5     9  T-   0 S-   0  21-30   75       101-150    29
                          3-  41    45    45       S1-2    12  A-   6 C-   0  31-40   37       151-200    13
                          4-  17    19    20       S3-4   134  E-  19         41-50   11          >200    19
                                                   S >5     2  I-   3          > 50    1         TOTAL 18691       TOTAL     347

ADVANCED COURSE IN        0-  36    19    22       Q1-2     2  L-  63 P-   4   1-10   86         1- 50   289       IN-DPT     60
 PROGRAMMING              1- 189   197   195       Q3-4    59  R- 248 D-   0  11-20  156        51-100    57      OUT-DPT    163
                          2- 102   108   102       Q >5    16  T-   0 S-   0  21-30  110       101-150    17
                          3-  32    35    40       S1-2    15  A-   6 C-   0  31-40   11       151-200     2
                          4-   7     7     7       S3-4   261  E-  33         41-50    3          >200     1
                                                   S >5     0  I-  12          > 50    0         TCTAL 12352       TOTAL     223

FIRST COURSE IN COMPUTER  0-   1     3     1       Q1-2     1  L-  20 P-   1   1-10   10         1- 50    27       IN-DPT     13
 DESIGN                   1-  21    19    20       Q3-4     8  R-  21 D-   0  11-20   16        51-100     9      OUT-CPT      3
                          2-  13    13    13       Q >5     4  T-   0 S-   0  21-30    9       101-150     3
                          3-   6     5     6       S1-2     2  A-   0 C-   0  31-40    3       151-200     1
                          4-   1     2     2       S3-4    25  E-   0         41-50    3          >200     2
                                                   S >5     0  I-   0          > 50    1         TOTAL  2437       TOTAL      15

ADVANCED COURSE IN COM-   0-   8     7     3       Q1-2     1  L-  21 P-   2   1-10   21         1- 50    45       IN-DPT     12
 PUTER DESIGN (COMPUTER   1-  24    26    29       Q3-4    14  R-  27 D-   0  11-20   19        51-100     5      OUT-DPT      9
 ARCHITECTURE)            2-  10     9    10       Q >5     0  T-   0 S-   0  21-30   10       101-150     2
                          3-   7     7     7       S1-2     2  A-   0 C-   0  31-40    1       151-200     0
                          4-   3     3     3       S3-4    33  E-   2         41-50    0          >20C     0
                                                   S >5     1  I-   0          > 50    1         TOTAL  1399       TOTAL      20

PROGRAMMING LANGUAGES     0-  23    15    14       Q1-2     2  L-  50 P-   5   1-10   49         1- 50   135       IN-DPT    132
 (STRUCTURE, ETC.)        1- 102   106   105       Q3-4    27  R-  88 D-   0  11-20   71        51-100    26      OUT-DPT     30
                          2-  27    29    32       Q >5    16  T-   0 S-   2  21-30   36       101-150     6
                          3-  16    16    15       S1-2     3  A-   3 C-   2  31-40    7       151-200     3
                          4-   6     8     8       S3-4   110  E-  23         41-50    5          >200     4
                                                   S >5     7  I-   1          > 50    6         TCTAL  6809       TOTAL     162

OPERATING SYSTEMS         0-  37    25    19       Q1-2     1  L-  82 P-   0   1-10   67         1- 50   174       IN-DPT     72
 (SYSTEMS PROGRAMMING,    1- 123   135   137       Q3-4    42  R- 102 D-   0  11-20   74        51-100    19      CUT-DPT     58
 ETC.)                    2-  29    24    29       Q >5    14  T-   1 S-   0  21-30   41       101-150     8
                          3-  11    16    12       S1-2    11  A-   6 C-   0  31-40   17       151-200     1
                          4-   3     3     6       S3-4   126  E-  12         41-50    2          >200     1
                                                   S >5     2  I-   0          > 50    2         TOTAL  5550       TOTAL     130

DATA STRUCTURES           0-  22    14    11       Q1-2     0  L-  58 P-   0   1-10   39         1- 50    94       IN-DPT    151
                          1-  70    76    79       Q3-4    23  R-  46 D-   1  11-20   47        51-100    14      OUT-DPT     28
                          2-  12    14    15       Q >5     7  T-   0 S-   0  21-30   18       101-150     1
                          3-   2     2     1       S1-2     2  A-   3 C-   0  31-40    3       151-200     1
                          4-   4     4     4       S3-4    71  E-   2         41-50    1          >200     0
                                                   S >5     0  I-   0          > 50    2         TOTAL  2490       TOTAL     179
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SUMMARY BY COURSE TYPE
CONTINUED

GROUP (2500-9999)

COURSE DESCRIPTION	NUMBER OF TERMS OFFERED	76-77	77-78	78-79	CR HCURS QTR AND SEMESTER		MODE OF OPER				** AVERAGE NO.	SECT SIZE **	*ENRCLLMENT* * 1976-77 * NO.	FREQ*	CCST COMPUTER SVCS * 1976-77 (THOUS$) ON AND OFF-CAMPUS	
AUTOMATA THEORY	0-	5	10	4	Q1-2	0	L-	23	P-	0	1-10	23	1- 50	30	IN-DPT	0
	1-	24	18	24	Q3-4	8	R-	7	D-	0	11-20	6	51-100	1	OUT-DPT	0
	2-	1	2	2	Q >5	1	T-	0	S-	0	21-30	1	101-150	0		
	3-	1	1	1	S1-2	1	A-	0	C-	0	31-40	1	151-200	0		
	4-	0	0	0	S3-4	20	E-	1			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	344	TOTAL	0
SIMULATION APPLICATIONS (NON-ECONCMETRIC)	0-	5	8	3	Q1-2	1	L-	23	P-	0	1-10	18	1- 50	40	IN-DPT	3
	1-	34	31	35	Q3-4	12	R-	12	D-	0	11-20	14	51-100	0	OUT-DPT	4
	2-	1	1	2	Q >5	1	T-	0	S-	1	21-30	4	101-150	0		
	3-	0	0	0	S1-2	1	A-	0	C-	0	31-40	3	151-200	0		
	4-	0	0	0	S3-4	21	E-	4			41-50	1	>200	0		
					S >5	1	I-	0			> 50	0	TOTAL	552	TOTAL	7
SIMULATION LANGUAGES AND/OR TECHNIQUES	0-	4	10	6	Q1-2	0	L-	20	P-	0	1-10	20	1- 50	41	IN-DPT	9
	1-	35	29	32	Q3-4	15	R-	20	D-	0	11-20	13	51-100	2	OUT-DPT	11
	2-	3	3	4	Q >5	0	T-	0	S-	1	21-30	9	101-150	0		
	3-	1	1	1	S1-2	3	A-	1	C-	0	31-40	1	151-200	0		
	4-	0	0	0	S3-4	22	E-	0			41-50	0	>200	0		
					S >5	0	I-	1			> 50	0	TOTAL	642	TOTAL	20
ARTIFICIAL INTELLIGENCE (HEURISTIC PROGRAMMING)	0-	2	4	0	Q1-2	0	L-	29	P-	1	1-10	17	1- 50	33	IN-DPT	112
	1-	31	29	33	Q3-4	9	R-	2	D-	0	11-20	14	51-100	2	OUT-DPT	9
	2-	2	2	2	Q >5	0	T-	0	S-	2	21-30	5	101-150	0		
	3-	0	0	0	S1-2	1	A-	1	C-	0	31-40	0	151-200	1		
	4-	1	1	1	S3-4	25	E-	1			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	750	TOTAL	121
HYBRID COMPUTERS	0-	0	0	0	Q1-2	0	L-	0	P-	0	1-10	1	1- 50	2	IN-DPT	1
	1-	1	1	1	Q3-4	2	R-	1	D-	0	11-20	1	51-100	1	OUT-DPT	0
	2-	1	1	1	Q >5	0	T-	0	S-	0	21-30	1	101-150	0		
	3-	0	0	0	S1-2	0	A-	0	C-	0	31-40	0	151-200	0		
	4-	1	1	1	S3-4	1	E-	2			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	73	TOTAL	1
DISCRETE STRUCTURES	0-	10	2	6	Q1-2	0	L-	36	P-	0	1-10	15	1- 50	39	IN-DPT	2
	1-	25	33	30	Q3-4	11	R-	6	D-	0	11-20	19	51-100	4	OUT-DPT	2
	2-	7	6	5	Q >5	1	T-	0	S-	0	21-30	6	101-150	1		
	3-	2	3	3	S1-2	1	A-	1	C-	0	31-40	3	151-200	0		
	4-	0	0	0	S3-4	28	E-	1			41-50	1	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	1015	TOTAL	5
COMPUTER ORGANIZATION	0-	7	7	4	Q1-2	1	L-	26	P-	0	1-10	21	1- 50	54	IN-DPT	18
	1-	41	41	46	Q3-4	15	R-	31	D-	0	11-20	26	51-100	9	OUT-DPT	10
	2-	12	12	10	Q >5	0	T-	1	S-	1	21-30	14	101-150	4		
	3-	3	2	3	S1-2	3	A-	3	C-	0	31-40	4	151-200	0		
	4-	4	4	4	S3-4	42	E-	4			41-50	0	>200	0		
					S >5	0	I-	1			> 50	2	TOTAL	2025	TOTAL	28
SWITCHING THEORY	0-	5	3	3	Q1-2	1	L-	16	P-	2	1-10	9	1- 50	19	IN-DPT	0
	1-	11	14	14	Q3-4	6	R-	3	D-	0	11-20	5	51-100	3	OUT-DPT	1
	2-	3	3	2	Q >5	0	T-	0	S-	0	21-30	2	101-150	0		
	3-	2	1	2	S1-2	1	A-	0	C-	0	31-40	4	151-200	0		
	4-	1	1	1	S3-4	13	E-	1			41-50	2	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	511	TOTAL	1
SEQUENTIAL MACHINES	0-	4	5	3	Q1-2	0	L-	9	P-	0	1-10	6	1- 50	12	IN-DPT	0
	1-	7	6	8	Q3-4	2	R-	1	D-	0	11-20	4	51-100	0	OUT-DPT	0
	2-	0	0	0	Q >5	0	T-	0	S-	0	21-30	1	101-150	0		
	3-	1	1	1	S1-2	0	A-	2	C-	0	31-40	1	151-200	0		
	4-	0	0	0	S3-4	9	E-	0			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	176	TOTAL	0
COMPILER CCNSTRUCTION	0-	18	19	11	Q1-2	1	L-	40	P-	1	1-10	38	1- 50	75	IN-DPT	43
	1-	48	51	57	Q3-4	14	R-	28	D-	0	11-20	25	51-100	1	OUT-DPT	14
	2-	9	4	6	Q >5	4	T-	0	S-	3	21-30	13	101-150	1		
	3-	1	2	2	S1-2	2	A-	2	C-	0	31-40	1	151-200	0		
	4-	1	1	1	S3-4	53	E-	3			41-50	0	>200	0		
					S >5	1	I-	0			> 50	0	TOTAL	1133	TOTAL	57
FORMAL LANGUAGES AND SYNTACTIC ANALYSIS	0-	9	9	4	Q1-2	0	L-	23	P-	0	1-10	20	1- 50	33	IN-DPT	0
	1-	21	21	25	Q3-4	11	R-	7	D-	0	11-20	10	51-100	0	OUT-DPT	5
	2-	1	1	2	Q >5	0	T-	0	S-	0	21-30	2	101-150	0		
	3-	0	0	0	S1-2	0	A-	1	C-	0	31-40	1	151-200	0		
	4-	2	2	2	S3-4	22	E-	2			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	322	TOTAL	5
INTRODUCTCRY COMPUTER ORGANIZATION	0-	7	6	6	Q1-2	0	L-	28	P-	0	1-10	13	1- 50	38	IN-DPT	11
	1-	33	33	33	Q3-4	9	R-	16	D-	0	11-20	12	51-100	10	OUT-DPT	19
	2-	12	14	13	Q >5	3	T-	0	S-	0	21-30	20	101-150	3		
	3-	2	1	2	S1-2	2	A-	8	C-	0	31-40	7	151-200	0		
	4-	0	0	0	S3-4	35	E-	2			41-50	1	>200	3		
					S >5	0	I-	0			> 50	1	TOTAL	2844	TOTAL	30

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                                           SUMMARY BY COURSE TYPE
   GROUP (               2500-9999  )       CONTINUED
                        NUMBER  OF  TERMS           CR HOURS                        **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTION          OFFERED                QTR AND                                 SECT    * 1976-77  * 1976-77 (THOUS$)
                        76-77 77-78 78-79           SEMESTER   MODE OF OPER         NO.     SIZE    * NO.  FREQ* ON AND OFF-CAMPUS

ADVANCED COMPUTER          0-   8    6    3      Q1-2   0  L- 14 P-  0    1-10  11      1- 50    26     IN-DPT    0
ORGANIZATION               1-  16   19   22      Q3-4   8  R-  9 D-  0   11-20  10     51-100     2    OUT-DPT    9
                           2-   3    2    2      Q >5   1  T-  1 S-  0   21-30   5    101-150     0
                           3-   1    1    1      S1-2   2  A-  2 C-  0   31-40   2    151-200     0
                           4-   0    0    0      S3-4  17  E-  2         41-50   0       >200     0
                                                 S >5   0  I-  0          > 50   0      TOTAL   524      TOTAL    9

INFORMATION STORAGE        0-   5    7    2      Q1-2   0  L- 12 P-  0    1-10  10      1- 50    27     IN-DPT   20
 AND RETRIEVAL             1-  19   18   20      Q3-4   3  R- 14 D-  0   11-20  13     51-100     1    OUT-DPT    6
                           2-   3    1    4      Q >5   3  T-  0 S-  0   21-30   4    101-150     0
                           3-   1    2    2      S1-2   0  A-  2 C-  0   31-40   1    151-200     0
                           4-   0    0    0      S3-4  20  E-  0         41-50   0       >200     0
                                                 S >5   0  I-  0          > 50   0      TOTAL   594      TOTAL   26

COMPUTER GRAPHICS          0-   7    0    4      Q1-2   0  L-  6 P-  1    1-10  11      1- 50    19     IN-DPT    6
                           1-   9   15   11      Q3-4   3  R- 11 D-  0   11-20   6     51-100     1    OUT-DPT   27
                           2-   4    5    5      Q >5   0  T-  0 S-  0   21-30   2    101-150     0
                           3-   0    0    0      S1-2   4  A-  0 C-  0   31-40   0    151-200     0
                           4-   0    0    0      S3-4  12  E-  1         41-50   0       >200     0
                                                 S >5   0  I-  1          > 50   1      TOTAL   351      TOTAL   33

COMPUTABILITY              0-   6    4    1      Q1-2   1  L- 13 P-  0    1-10  13      1- 50    18     IN-DPT    0
                           1-  11   13   16      Q3-4   3  R-  4 D-  0   11-20   2     51-100     0    OUT-DPT    0
                           2-   0    0    0      Q >5   0  T-  0 S-  1   21-30   3    101-150     0
                           3-   1    1    1      S1-2   1  A-  0 C-  0   31-40   0    151-200     0
                           4-   0    0    0      S3-4  13  E-  0         41-50   0       >200     0
                                                 S >5   0  I-  0          > 50   0      TOTAL   165      TOTAL    0

INTRODUCTORY NUMERICAL     0-  17   18   14      Q1-2   1  L- 61 P-  1    1-10  42      1- 50   119     IN-DPT   53
 ANALYSIS (OR METHODS)     1-  86   85   90      Q3-4  25  R- 70 D-  0   11-20  66     51-100     6    OUT-DPT   27
                           2-  20   20   19      Q >5   2  T-  1 S-  0   21-30  23    101-150     4
                           3-  10   10   10      S1-2   4  A-  2 C-  0   31-40   2    151-200     2
                           4-   2    2    2      S3-4  89  E-  0         41-50   0       >200     4
                                                 S >5   3  I-  0          > 50   2      TOTAL  5450      TOTAL   79

ADVANCED NUMERICAL         0-  28   17   15      Q1-2   0  L- 38 P-  0    1-10  40      1- 50    57     IN-DPT    6
 ANALYSIS                  1-  26   37   39      Q3-4  14  R- 20 D-  0   11-20  14     51-100     1    OUT-DPT    6
                           2-   3    3    3      Q >5   1  T-  0 S-  0   21-30   3    101-150     0
                           3-   1    1    1      S1-2   1  A-  0 C-  0   31-40   1    151-200     0
                           4-   0    0    0      S3-4  41  E-  0         41-50   0       >200     0
                                                 S >5   0  I-  0          > 50   0      TOTAL   511      TOTAL   12

INTRODUCTORY OPERATIONS    0-  14    8    7      Q1-2   0  L- 45 P-  0    1-10  25      1- 50    61     IN-DPT    6
 RESEARCH                  1-  46   50   53      Q3-4  10  R- 22 D-  0   11-20  27     51-100     7    OUT-DPT    7
                           2-   8    9    7      Q >5   2  T-  1 S-  0   21-30  18    101-150     3
                           3-   3    3    3      S1-2   0  A-  2 C-  0   31-40   3    151-200     1
                           4-   3    4    4      S3-4  60  E-  4         41-50   1       >200     2
                                                 S >5   0  I-  0          > 50   0      TOTAL  2483      TOTAL   13

ADVANCED OPERATIONS        0-   8    4    4      Q1-2   0  L- 24 P-  0    1-10  13      1- 50    33     IN-DPT    0
 RESEARCH                  1-  23   28   28      Q3-4   6  R-  9 D-  0   11-20  16     51-100     2    OUT-DPT   16
                           2-   4    3    3      Q >5   2  T-  0 S-  0   21-30   6    101-150     1
                           3-   1    1    1      S1-2   0  A-  2 C-  0   31-40   1    151-200     0
                           4-   0    0    0      S3-4  27  E-  1         41-50   0       >200     0
                                                 S >5   0  I-  0          > 50   0      TOTAL   741      TOTAL   16

DATA COMMUNICATIONS        0-   5    6    2      Q1-2   1  L- 15 P-  0    1-10   9      1- 50    36     IN-DPT    5
                           1-  24   24   29      Q3-4  16  R- 15 D-  0   11-20  15     51-100     4    OUT-DPT    3
                           2-  11   10    9      Q >5   1  T-  0 S-  1   21-30  16    101-150     1
                           3-   0    0    0      S1-2   1  A-  4 C-  0   31-40   1    151-200     0
                           4-   1    1    1      S3-4  21  E-  6         41-50   0       >200     0
                                                 S >5   0  I-  0          > 50   0      TOTAL  1127      TOTAL    8

PROCESS CONTROL            0-   1    2    1      Q1-2   0  L-  3 P-  0    1-10   3      1- 50     7     IN-DPT  500
                           1-   6    4    5      Q3-4   3  R-  4 D-  0   11-20   2     51-100     0    OUT-DPT    1
                           2-   0    1    0      Q >5   0  T-  0 S-  0   21-30   2    101-150     0
                           3-   0    0    1      S1-2   0  A-  0 C-  1   31-40   0    151-200     0
                           4-   1    1    1      S3-4   5  E-  0         41-50   0       >200     1
                                                 S >5   0  I-  0          > 50   1      TOTAL  8134      TOTAL  501

DATA PREPARATION (KEY      0-   1    3    5      Q1-2   9  L-  2 P- 10    1-10  17      1- 50    30     IN-DPT   69
 PUNCH, VERIFIER, DATA     1-   8    7    6      Q3-4   7  R- 34 D-  0   11-20  23     51-100    19    OUT-DPT   32
 ENTRY,...)                2-  22   23   22      Q >5   4  T-  0 S-  0   21-30  11    101-150     3
                           3-  15   10   10      S1-2  19  A-  0 C-  0   31-40   4    151-200     4
                           4-  10   13   13      S3-4  16  E-  7         41-50   0       >200     0
                                                 S >5   0  I-  3          > 50   1      TOTAL  3556      TOTAL  102

UNIT RECORD (EAM)          0-   1    2    2      Q1-2   2  L-  0 P-  1    1-10   0      1- 50     7     IN-DPT    0
                           1-   8    8    8      Q3-4   4  R- 11 D-  0   11-20   4     51-100     4    OUT-DPT    5
                           2-   1    2    2      Q >5   0  T-  0 S-  0   21-30   5    101-150     2
                           3-   3    1    1      S1-2   2  A-  0 C-  0   31-40   5    151-200     0
                           4-   1    1    1      S3-4   6  E-  2         41-50   0       >200     1
                                                 S >5   0  I-  0          > 50   0      TOTAL   995      TOTAL    5
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                                                     SUMMARY BY CCURSE TYPE
    GROUP I                  2500-9999  I             CONTINUED
                             NUMBER  OF  TERMS          CR HCURS                        **  AVERAGF ** *ENROLLMENT* COST COMPUTER SVCS
  COURSE DESCRIPTION             OFFERED                QTR AND                                 SECT    * 1976-77  * 1976-77 (THOUS$)
                            76-77 77-78 78-79           SEMESTER   MODE OF OPER         NO.     SIZE    * NO.   FREQ* ON AND OFF-CAMPUS

INTRODUCTORY COURSE       0-   6     5     7            Q1-2    3  L-  71 P-  1    1-10     10        1- 50    41      IN-DPT   112
 IN DATA PROCESSING       1-  36    37    36            Q3-4   35  R-  80 D-  0   11-20     36       51-100    34      OUT-DPT  113
                          2-  54    48    46            Q >5    5  T-   2 S-  0   21-30     77      101-150    21
                          3-  65    70    69            S1-2   11  A-  14 C-  0   31-40     47      151-200    15
                          4-  34    35    37            S3-4  130  E-  27         41-50     14         >200    86
                                                        S >5    1  I-   2          > 50     13       TOTAL  47341      TOTAL    224

ADVANCED COURSE IN DATA   0-   7     3     5            Q1-2    0  L-   7 P-  2    1-10     16        1- 50    37      IN-DPT    29
 PROCESSING               1-  28    31    29            Q3-4   10  R-  27 D-  0   11-20     14       51-100     9      CUT-DPT    0
                          2-  12    12    12            Q >5    3  T-   0 S-  1   21-30     12      101-150     0
                          3-   2     3     3            S1-2    9  A-   2 C-  0   31-40      6      151-200     1
                          4-   0     0     0            S3-4   26  E-   6         41-50      0         >200     2
                                                        S >5    0  I-   4          > 50      1       TOTAL   2364      TOTAL     29

PRCBLEM SOLVING COURSE    0-   6     8    10            Q1-2    5  L-  38 P-  5    1-10     32        1- 50    84      IN-DPT    31
 IN BUSINESS APPLI-       1-  59    58    57            Q3-4   15  R-  38 D-  0   11-20     46       51-100    17      OUT-DPT    3
 CATIONS                  2-  38    36    34            Q >5    7  T-   0 S-  5   21-30     20      101-150     8
                          3-  11    13    14            S1-2    2  A-  19 C-  0   31-40     24      151-200     4
                          4-   9     8     8            S3-4   86  E-   6         41-50      1         >200    10
                                                        S >5    1  I-  12          > 50      0       TOTAL   9348      TOTAL     34

ADVANCED BUSINESS APPLI-  0-   8     7     5            Q1-2    2  L-  17 P-  2    1-10     14        1- 50    43      IN-DPT     8
 CATIONS (MARKETING,      1-  26    26    28            Q3-4    5  R-  14 D-  0   11-20     22       51-100     4      OUT-DPT    2
 FINANCE, PRODUCTION,     2-  10    10    11            Q >5    1  T-   0 S-  2   21-30      8      101-150     0
 ETC.)                    3-   7     8     7            S1-2    2  A-   9 C-  0   31-40      6      151-200     4
                          4-   0     0     0            S3-4   41  E-   3         41-50      1         >200     0
                                                        S >5    0  I-   4          > 50      0       TOTAL   1710      TOTAL     10

INTRODUCTORY SYSTEMS      0-  15     7     6            Q1-2    1  L-  63 P-  1    1-10     27        1- 50   118      IN-DPT    10
 ANALYSIS (BUSINESS)      1-  79    81    80            Q3-4   31  R-  44 D-  0   11-20     55       51-100    17      CUT-CPT    3
                          2-  35    40    41            Q >5    7  T-   1 S-  0   21-30     48      101-150     5
                          3-  13    14    15            S1-2    2  A-  20 C-  0   31-40     10      151-200     1
                          4-   0     0     0            S3-4   98  E-  12         41-50      2         >200     1
                                                        S >5    1  I-   1          > 50      0       TOTAL   4920      TOTAL     12

LARGE SCALE INFORMATION   0-   3     1     0            Q1-2    0  L-   4 P-  0    1-10      4        1- 50    10      IN-DPT     1
 PROCESSING SYSTEMS       1-   5     7     8            Q3-4    2  R-   5 D-  0   11-20      5       51-100     2      OUT-DPT    0
                          2-   3     3     3            Q >5    1  T-   0 S-  1   21-30      1      101-150     0
                          3-   1     1     1            S1-2    0  A-   0 C-  0   31-40      2      151-200     0
                          4-   0     0     0            S3-4    9  E-   2         41-50      0         >200     0
                                                        S >5    0  I-   0          > 50      0       TOTAL    357      TOTAL      1

FILE ORGANIZATION         0-   2     2     1            Q1-2    0  L-   4 P-  0    1-10      3        1- 50    21      IN-CPT     1
                          1-  15    14    15            Q3-4    6  R-  14 C-  0   11-20     17       51-100     5      OUT-DPT   21
                          2-   9     8     8            Q >5    0  T-   1 S-  0   21-30      5      101-150     1
                          3-   1     3     3            S1-2    0  A-   3 C-  0   31-40      2      151-200     0
                          4-   0     0     0            S3-4   18  E-   5         41-50      0         >200     0
                                                        S >5    0  I-   0          > 50      0       TOTAL    970      TOTAL     22

DATA BASE MANAGEMENT      0-  13     7     1            Q1-2    2  L-  27 P-  1    1-10     19        1- 50    45      IN-DPT    16
                          1-  30    34    39            Q3-4   15  R-  12 D-  0   11-20     16       51-100     5      OUT-DPT    5
                          2-   6     6     8            Q >5    1  T-   0 S-  0   21-30     11      101-150     1
                          3-   2     4     3            S1-2    0  A-   5 C-  0   31-40      4      151-200     0
                          4-   0     0     0            S3-4   31  E-   6         41-50      1         >200     0
                                                        S >5    1  I-   0          > 50      0       TOTAL   1084      TOTAL     21

INFORMATION SYSTEMS       0-  13     7     8            Q1-2    2  L-  31 P-  1    1-10     21        1- 50    67      IN-CPT    17
 DESIGN (INTRODUCTORY)    1-  51    57    56            Q3-4   23  R-  42 D-  0   11-20     42       51-100    13      OUT-DPT   21
                          2-  14    13    13            Q >5    2  T-   1 S-  1   21-30     14      101-150     4
                          3-   7     8     8            S1-2    3  A-   1 C-  0   31-40      7      151-200     1
                          4-   2     2     2            S3-4   52  E-   9         41-50      0         >200     2
                                                        S >5    0  I-   1          > 50      3       TOTAL   3733      TOTAL     38

INFORMATION SYSTEMS       0-   8     5     7            Q1-2    0  L-  12 P-  1    1-10     21        1- 50    40      IN-DPT     4
 DESIGN (ADVANCED)        1-  29    33    31            Q3-4   16  R-  25 D-  0   11-20     15       51-100     6      OUT-DPT    9
                          2-   5     4     4            Q >5    3  T-   1 S-  0   21-30      8      101-150     1
                          3-   3     2     2            S1-2    0  A-   1 C-  1   31-40      3      151-200     0
                          4-   2     3     3            S3-4   26  E-   4         41-50      0         >200     0
                                                        S >5    0  I-   2          > 50      0       TOTAL   1123      TOTAL     13

MANAGEMENT INFORMATION    0-   6     5     2            Q1-2    0  L-  21 P-  0    1-10     10        1- 50    38      IN-DPT     7
 SYSTEMS                  1-  29    28    31            Q3-4    9  R-  19 D-  0   11-20     18       51-100     9      CUT-DPT    4
                          2-   9    11    11            Q >5    0  T-   0 S-  2   21-30     16      101-150     2
                          3-   5     5     5            S1-2    3  A-   7 C-  0   31-40      5      151-200     1
                          4-   2     2     2            S3-4   36  E-   1         41-50      1         >200     1
                                                        S >5    2  I-   1          > 50      1       TOTAL   2039      TOTAL     11

MANAGEMENT CF COMPUTER    0-   4     4     3            Q1-2    0  L-  10 P-  2    1-10      9        1- 50    21      IN-DPT     2
 CENTERS OF INFORMATION   1-  14    14    15            Q3-4    6  R-   9 D-  0   11-20      6       51-100     4      OUT-DPT    0
  PROCESSING DEPARTMENTS  2-   5     6     5            Q >5    0  T-   0 S-  2   21-30     10      101-150     1
                          3-   3     3     4            S1-2    1  A-   2 C-  0   31-40      1      151-200     1
                          4-   1     0     0            S3-4   20  E-   2         41-50      1         >200     0
                                                        S >5    0  I-   0          > 50      0       TOTAL    916      TOTAL      2
                                                     SUMMARY BY COURSE TYPE
      GROUP I                     2500-9999  I       CONTINUED
                                NUMBER  OF  TERMS         CR HOURS                              **  AVERAGE **  *ENROLLMENT* COST COMPUTER SVCS
  COURSE DESCRIPTION                 OFFERED              QTR AND                                   SECT        * 1976-77  * 1976-77 (THOUS$)
                                 76-77 77-78 78-79        SEMESTER    MCDE OF OPER       NO.    SIZE        * NO.  FREQ* ON AND OFF-CAMPUS

 COMPUTERS AND ACCOUNTING 0-    1     5     5             Q1-2     0  L-  10 P-    0   1-10     2          1- 50   12        IN-DPT      4
  (INCLUDING AUDITING)    1-   10     5     5             Q3-4     0  R-   5 D-    0  11-20     8         51-100    4       OUT-DPT      3
                          2-    6     7     7             Q >5     1  T-   0 S-    1  21-30     5        101-150    1
                          3-    1     0     0             S1-2     0  A-   2 C-    0  31-40     3        151-200    0
                          4-    0     1     1             S3-4    16  E-   0            41-50     0           >200    1
                                                          S >5     0  I-   0             > 50     0         TOTAL   918       TOTAL        7

 ECONOMETRIC SIMULATION   0-    1     1     0             Q1-2     0  L-   0 P-    0   1-10     2          1- 50    4        IN-DPT      0
  APPLICATIONS            1-    2     2     3             Q3-4     2  R-   5 C-    0  11-20     1         51-100    1       OUT-DPT      1
                          2-    3     2     2             Q >5     0  T-   0 S-    0  21-30     3        101-150    1
                          3-    0     1     1             S1-2     0  A-   0 C-    0  31-40     0        151-200    0
                          4-    0     0     0             S3-4     4  E-   1            41-50     0           >200    0
                                                          S >5     0  I-   0             > 50     0         TOTAL   215       TOTAL        1

 INSTRUCTIONAL DESIGN     0-    0     1     0             Q1-2     0  L-   1 P-    0   1-10     1          1- 50    1        IN-DPT      0
                          1-    1     0     1             Q3-4     0  R-   0 D-    0  11-20     0         51-100    0       OUT-CPT      0
                          2-    0     0     0             Q >5     0  T-   0 S-    0  21-30     0        101-150    0
                          3-    0     0     0             S1-2     0  A-   0 C-    0  31-40     0        151-200    0
                          4-    0     0     0             S3-4     1  E-   0            41-50     0           >200    0
                                                          S >5     0  I-   0             > 50     0         TOTAL     3       TOTAL        0

 INSTRUCTIONAL SYSTEMS    0-    3     2     3             Q1-2     0  L-   3 P-    0   1-10     6          1- 50    6        IN-DPT      0
                          1-    3     3     3             Q3-4     3  R-   3 D-    0  11-20     0         51-100    0       CUT-DPT      0
                          2-    0     1     0             Q >5     0  T-   0 S-    0  21-30     0        101-150    0
                          3-    0     0     0             S1-2     0  A-   0 C-    0  31-40     0        151-200    0
                          4-    0     0     0             S3-4     3  E-   0            41-50     0           >200    0
                                                          S >5     0  I-   0             > 50     0         TOTAL    11       TOTAL        0

 COMPUTER BASED           0-    2     7     6             Q1-2     0  L-   5 P-    0   1-10    10          1- 50   15        IN-DPT      0
 INSTRUCTION              1-   11     8     9             Q3-4     1  R-   6 D-    0  11-20     6         51-100    3       OUT-DPT      1
                          2-    4     0     1             Q >5     1  T-   0 S-    3  21-30     2        101-150    0
                          3-    1     3     2             S1-2     3  A-   0 C-    1  31-40     0        151-200    0
                          4-    0     0     0             S3-4    12  E-   2            41-50     0           >200    0
                                                          S >5     0  I-   1             > 50     0         TCTAL   380       TOTAL        1

 OTHER                    0-   71    51    47             Q1-2    44  L- 151 P-   39   1-10   246          1- 50  402        IN-DPT     45
                          1-  201   220   220             Q3-4    67  R- 127 D-    9  11-20   132         51-100   38       OUT-DPT     94
                          2-  112   107   111             Q >5    20  T-   1 S-   25  21-30    63        101-150   19
                          3-   53    60    59             S1-2    70  A-   5 C-    0  31-40    23        151-200    6
                          4-   36    35    36             S3-4   253  E-  18            41-50     8           >200    8
                                                          S >5     9  I-  98             > 50     1         TOTAL 14311       TOTAL      139

 DESCRIPTICN NOT CODED    0-   66    77    93             Q1-2     1  L- 108 P-    1   1-10    89          1- 50  115        IN-DPT     27
                          1-   44    26    22             Q3-4     7  R-  20 D-    2  11-20    26         51-100    8       CUT-DPT      5
                          2-   21    20    15             Q >5    22  T-   0 S-    1  21-30    14        101-150    6
                          3-    3    11     4             S1-2     8  A-   0 C-    0  31-40     4        151-200    4
                          4-    1     1     1             S3-4    96  E-   1            41-50     0           >200    2
                                                          S >5     1  I-   2             > 50     2         TOTAL  3837       TOTAL       32
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INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PROGRAPS IN U.S. HIGHER EDUCATICN FOR 1976-77
                 CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FCUNDATION

                                      SUMMARY BY COURSE TYPE

   GROUP (             10000-19999)
                     NUMBER  OF  TERMS       CR HOURS                     **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTICN       OFFERED            QTR AND                           SECT     * 1976-77  * 1976-77 (THCUS$)
                     76-77 77-78 78-79       SEMESTER   MCDE CF OPER     NO.   SIZE     * NO.  FREQ* ON AND OFF-CAMPUS

COMPUTER APPRECIATICN    0-  4    3    2     Q1-2    0  L-  19 P-  0   1-10     9      1- 50   23      IN-DPT     7
                         1- 15   16   17     Q3-4   14  R-  16 D-  0  11-20     9     51-10C    5     OUT-CPT     3
                         2-  7    7    7     Q >5    1  T-   0 S-  0  21-30     8    101-150    2
                         3- 13   10    9     S1-2    1  A-   5 C-  0  31-40    13    151-200    2
                         4-  5    8    9     S3-4   23  E-   4        41-50     1       >200   13
                                             S >5    0  I-   1         > 50     5      TOTAL 7204      TOTAL     10

PROBLEM SOLVING COURSE   0-  3    2    0     Q1-2    1  L-   8 P-  0   1-10    13      1- 50   31      IN-DPT     0
 IN THE HUMANITIES       1- 20   20   22     Q3-4   11  R-  13 D-  0  11-20    11     51-100    6     OUT-DPT     5
                         2- 12   12   11     Q >5    2  T-   0 S-  3  21-30    10    101-150    0
                         3-  0    0    1     S1-2    2  A-   6 C-  0  31-40     2    151-200    0
                         4-  2    3    3     S3-4   21  E-   5        41-50     1       >200    0
                                             S >5    0  I-   2         > 50     0      TOTAL  928      TOTAL      5

INTRODUCTORY COURSE IN   0- 13    9    5     Q1-2   18  L-  59 P-  3   1-10    33      1- 50   99      IN-DPT   406
 SOME COMPILER LANGUAGE  1- 53   55   56     Q3-4   65  R- 144 D-  0  11-20    45     51-100   36     OUT-DPT  1035
 SUCH AS FORTRAN, PL/1,  2- 61   56   56     Q >5    3  T-   0 S-  0  21-30    77    101-150   23
 BASIC, ALGCL            3- 57   64   65     S1-2   39  A-   9 C-  0  31-40    35    151-200   12
                         4- 41   40   40     S3-4   89  E-  11        41-50    15       >200   58
                                             S >5    0  I-   2         > 50    23      TOTAL 34985     TOTAL   1441

INTRODUCTORY COURSE IN A 0-  8    6    4     Q1-2    1  L-  20 P-  2   1-10    13      1- 50   42      IN-DPT    48
 LANGUAGE SUCH AS COBOL  1- 35   31   33     Q3-4   23  R-  67 D-  0  11-20    16     51-100   25     CUT-DPT   107
                         2- 22   28   27     Q >5    1  T-   0 S-  0  21-30    42    101-150   14
                         3- 23   24   23     S1-2    7  A-   2 C-  0  31-40    16    151-200    4
                         4- 11   10   12     S3-4   50  E-   7        41-50     7       >200   14
                                             S >5    0  I-   1         > 50     5      TOTAL 10573     TOTAL    155

PROBLEM SOLVING COURSE   0-  8    6    5     Q1-2    0  L-  24 P-  2   1-10    26      1- 50   62      IN-DPT    11
 IN ENGINEERING OR       1- 49   52   52     Q3-4    9  R-  18 D-  1  11-20    23     51-100   18     OUT-DPT    12
 SCIENTIFIC APPLI-       2- 26   25   26     Q >5    1  T-   0 S-  0  21-30    22    101-150    4
 CATIONS                 3-  7    8    8     S1-2   16  A-  21 C-  0  31-40    10    151-200    1
                         4-  1    0    0     S3-4   58  E-  25        41-50     3       >200    6
                                             S >5    3  I-   0         > 50     7      TOTAL 5407      TOTAL     23

INTRODUCTORY COURSE IN   0-  4    7    7     Q1-2    6  L-  34 P-  0   1-10    12      1- 50   35      IN-DPT    72
 PROGRAMMING             1- 16   14    9     Q3-4   28  R-  54 D-  0  11-20    13     51-100   19     OUT-DPT   206
                         2- 30   28   30     Q >5    5  T-   0 S-  0  21-30    34    101-150   12
                         3- 36   37   39     S1-2    9  A-   4 C-  0  31-40    23    151-200    5
                         4- 12   12   13     S3-4   49  E-   8        41-50     4       >200   30
                                             S >5    0  I-   1         > 50    15      TOTAL 19942     TOTAL    278

ADVANCED COURSE IN       0- 12    7    4     Q1-2    3  L-  59 P-  2   1-10    25      1- 50  103      IN-DPT    65
 PROGRAMMING             1- 57   62   62     Q3-4   50  R-  79 D-  0  11-20    50     51-100   32     OUT-DPT    74
                         2- 49   47   52     Q >5    3  T-   0 S-  1  21-30    57    101-150   11
                         3- 30   29   30     S1-2    4  A-   3 C-  0  31-40    17    151-200    7
                         4-  7   10    7     S3-4   68  E-   7        41-50     4       >200    2
                                             S >5    1  I-   4         > 50     2      TOTAL 7525      TOTAL    138

FIRST COURSE IN COMPUTER 0-  4    5    4     Q1-2    1  L-  18 P-  0   1-10     7      1- 50   25      IN-DPT    17
 DESIGN                  1- 21   19   19     Q3-4   10  R-  18 D-  0  11-20    11     51-100    7     OUT-DPT    29
                         2-  6    7    8     Q >5    0  T-   0 S-  0  21-30     7    101-150    5
                         3-  6    6    6     S1-2    2  A-   0 C-  0  31-40     7    151-200    1
                         4-  3    3    3     S3-4   23  E-   2        41-50     5       >200    3
                                             S >5    0  I-   3         > 50     4      TOTAL 2701      TOTAL     45

ADVANCED COURSE IN COM-  0- 14    8    9     Q1-2    1  L-  26 P-  0   1-10    24      1- 50   40      IN-DPT    98
 PUTER DESIGN (COMPUTER  1- 20   25   23     Q3-4   21  R-  16 D-  0  11-20     5     51-100    2     OUT-DPT     5
 ARCHITECTURE)           2-  9    9    9     Q >5    1  T-   0 S-  1  21-30    11    101-150    0
                         3-  1    2    3     S1-2    0  A-   1 C-  0  31-40     2    151-200    1
                         4-  0    0    0     S3-4   21  E-   0        41-50     1       >200    1
                                             S >5    0  I-   0         > 50     1      TOTAL 1108      TOTAL    104

PROGRAMMING LANGUAGES    0- 11   10    8     Q1-2    1  L-  43 P-  0   1-10    27      1- 50   66      IN-DPT    30
 (STRUCTURE, ETC.)       1- 52   52   53     Q3-4   23  R-  27 D-  0  11-20    18     51-100   11     OUT-DPT    48
                         2- 10   10   12     Q >5    2  T-   0 S-  1  21-30    22    101-150    2
                         3-  5    6    5     S1-2    0  A-   1 C-  0  31-40     4    151-200    0
                         4-  1    1    1     S3-4   44  E-   2        41-50     5       >200    0
                                             S >5    0  I-   5         > 50     3      TOTAL 2189      TOTAL     79

OPERATING SYSTEMS        0- 20   12    8     Q1-2    5  L-  74 P-  0   1-10    39      1- 50   95      IN-DPT    46
 (SYSTEMS PROGRAMMING,   1- 68   77   78     Q3-4   49  R-  33 D-  0  11-20    27     51-100   16     OUT-DPT    66
  ETC.)                  2- 22   21   23     Q >5    4  T-   0 S-  0  21-30    29    101-150    2
                         3-  4    4    5     S1-2    1  A-   3 C-  0  31-40    10    151-200    0
                         4-  0    0    0     S3-4   50  E-   2        41-50     4       >200    1
                                             S >5    0  I-   2         > 50     5      TCTAL 3707      TOTAL    111

DATA STRUCTURES          0- 12    7    6     Q1-2    2  L-  44 P-  0   1-10    16      1- 50   49      IN-DPT    38
                         1- 33   34   31     Q3-4   24  R-  21 D-  0  11-20    19     51-100   16     OUT-DPT    53
                         2- 17   21   24     Q >5    3  T-   0 S-  0  21-30    23    101-150    5
                         3-  7    7    8     S1-2    0  A-   1 C-  0  31-40     5    151-200    1
                         4-  2    2    2     S3-4   40  E-   5        41-50     4       >200    0
                                             S >5    0  I-   0         > 50     4      TOTAL 2905      TOTAL     91
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SUMMARY BY COURSE TYPE
CONTINUED

GROUP I (10000-19999)

COURSE DESCRIPTION	NUMBER OF TERMS OFFERED	76-77	77-78	78-79	CR HOURS QTR AND SEMESTER		MODE OF OPER				** NO.	AVERAGE SECT SIZE **	*ENROLLMENT* 1976-77 * NO.	FREQ*	COST COMPUTER SVCS * 1976-77 (THOUS$) ON AND OFF-CAMPUS	
AUTOMATA THEORY	0-	9	7	8	Q1-2	1	L-	18	P-	0	1-10	13	1- 50	20	IN-DPT	0
	1-	10	12	11	Q3-4	4	R-	3	D-	0	11-20	5	51-100	2	OUT-DPT	1
	2-	3	3	3	Q >5	2	T-	0	S-	2	21-30	4	101-150	1		
	3-	1	1	1	S1	1	A-	0	C-	0	31-40	0	151-200	0		
	4-	0	0	0		10	E-	0			41-50	1	>200	0		
					>5	0	I-	0			> 50	0	TOTAL	430	TOTAL	1
SIMULATION APPLICATIONS (NON-ECONOMETRIC)	0-	6	1	1	Q1-2	0	L-	8	P-	0	1-10	10	1- 50	30	IN-DPT	1
	1-	21	25	25	Q3-4	8	R-	17	D-	0	11-20	17	51-100	2	OUT-DPT	55
	2-	6	7	7	Q >5	2	T-	0	S-	2	21-30	5	101-150	1		
	3-	1	1		S1-2	0	A-	5	C-	0	31-40	1	151-200	0		
	4-	0	0		S3-4	21	E-	2			41-50	1	>200	1		
					S >5	0	I-	0			> 50	0	TOTAL	1076	TOTAL	56
SIMULATION LANGUAGES AND/OR TECHNIQUES	0-	8	5	2	Q1-2	1	L-	27	P-	0	1-10	18	1- 50	42	IN-DPT	12
	1-	28	33	34	Q3-4	18	R-	17	D-	0	11-20	11	51-100	4	OUT-DPT	12
	2-	12	10	12	Q >5	1	T-	0	S-	0	21-30	13	101-150	2		
	3-	0	0	0	S1-2	0	A-	3	C-	0	31-40	4	151-200	0		
	4-	0	0	0	S3-4	27	E-	1			41-50	0	>200	0		
					S >5	0	I-	0			> 50	2	TOTAL	1178	TOTAL	24
ARTIFICIAL INTELLIGENCE (HEURISTIC PROGRAMMING)	0-	19	14	11	Q1-2	5	L-	30	P-	1	1-10	31	1- 50	47	IN-DPT	1
	1-	28	34	37	Q3-4	28	R-	11	C-	0	11-20	8	51-100	2	OUT-DPT	13
	2-	2	1	1	Q >5	3	T-	0	S-	5	21-30	7	101-150	0		
	3-	0	0	0	S1-2	0	A-	1	C-	0	31-40	1	151-200	0		
	4-	0	0	0	S3-4	11	E-	1			41-50	0	>200	0		
					S >5	0	I-	0			> 50	2	TOTAL	595	TOTAL	14
HYBRID COMPUTERS	0-	5	3	1	Q1-2	0	L-	1	P-	0	1-10	5	1- 50	12	IN-DPT	4
	1-	7	9	11	Q3-4	4	R-	9	D-	0	11-20	6	51-100	1	OUT-DPT	2
	2-	1	1	1	Q >5	1	T-	0	S-	0	21-30	2	101-150	0		
	3-	0	0	0	S1-2	2	A-	3	C-	0	31-40	0	151-200	0		
	4-	0	0	0	S3-4	5	E-	0			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	159	TOTAL	6
DISCRETE STRUCTURES	0-	8	3	3	Q1-2	2	L-	22	P-	0	1-10	12	1- 50	20	IN-DPT	0
	1-	10	17	15	Q3-4	9	R-	3	D-	0	11-20	5	51-100	5	OUT-DPT	14
	2-	10	8	9	Q >5	3	T-	0	S-	0	21-30	7	101-150	3		
	3-	1	1	2	S1-2	0	A-	0	C-	0	31-40	3	151-200	0		
	4-	0	0	0	S3-4	13	E-	4			41-50	0	>200	1		
					S >5	0	I-	0			> 50	2	TOTAL	1169	TOTAL	14
COMPUTER ORGANIZATION	0-	6	4	3	Q1-2	3	L-	21	P-	0	1-10	11	1- 50	36	IN-DPT	4
	1-	25	28	28	Q3-4	13	R-	19	D-	0	11-20	16	51-100	7	OUT-DPT	18
	2-	9	8	9	Q >5	3	T-	0	S-	1	21-30	10	101-150	0		
	3-	3	3	3	S1-2	1	A-	1	C-	0	31-40	6	151-200	0		
	4-	0	0	0	S3-4	23	E-	1			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	1243	TOTAL	21
SWITCHING THEORY	0-	7	8	5	Q1-2	0	L-	19	P-	1	1-10	11	1- 50	22	IN-DPT	2
	1-	15	13	16	Q3-4	9	R-	6	D-	0	11-20	6	51-100	3	OUT-DPT	0
	2-	4	5	5	Q >5	0	T-	0	S-	0	21-30	6	101-150	2		
	3-	1	1	1	S1-2	2	A-	0	C-	0	31-40	2	151-200	0		
	4-	0	0	0	S3-4	15	E-	1			41-50	0	>200	0		
					S >5	0	I-	0			> 50	2	TOTAL	777	TOTAL	2
SEQUENTIAL MACHINES	0-	2	3	1	Q1-2	1	L-	6	P-	0	1-10	8	1- 50	11	IN-DPT	0
	1-	6	5	7	Q3-4	8	R-	6	D-	0	11-20	3	51-100	1	OUT-DPT	0
	2-	2	2	2	Q >5	1	T-	0	S-	0	21-30	1	101-150	0		
	3-	1	1	1	S1-2	0	A-	0	C-	0	31-40	0	151-200	0		
	4-	1	1	1	S3-4	1	E-	0			41-50	0	>200	0		
					S >5	0	I-	0			> 50	0	TOTAL	204	TOTAL	0
COMPILER CONSTRUCTION	0-	11	9	6	Q1-2	1	L-	30	P-	1	1-10	22	1- 50	50	IN-DPT	46
	1-	32	35	37	Q3-4	29	R-	23	D-	0	11-20	19	51-100	6	OUT-DPT	64
	2-	11	8	10	Q >5	3	T-	0	S-	1	21-30	11	101-150	1		
	3-	3	5	4	S1-2	0	A-	1	C-	0	31-40	1	151-200	0		
	4-	0	0	0	S3-4	23	E-	1			41-50	0	>200	0		
					S >5	0	I-	0			> 50	4	TOTAL	1263	TOTAL	110
FORMAL LANGUAGES AND SYNTACTIC ANALYSIS	0-	13	11	5	Q1-2	2	L-	29	P-	0	1-10	23	1- 50	36	IN-DPT	67
	1-	21	24	29	Q3-4	20	R-	9	D-	0	11-20	8	51-100	3	OUT-DPT	13
	2-	5	4	6	Q >5	4	T-	0	S-	2	21-30	7	101-150	2		
	3-	1	1	0	S1-2	1	A-	0	C-	1	31-40	1	151-200	0		
	4-	1	1	1	S3-4	13	E-	0			41-50	0	>200	0		
					S >5	0	I-	0			> 50	2	TOTAL	829	TOTAL	80
INTRODUCTORY COMPUTER ORGANIZATION	0-	5	0	0	Q1-2	4	L-	17	P-	3	1-10	11	1- 50	22	IN-DPT	2
	1-	17	21	19	Q3-4	9	R-	18	D-	0	11-20	9	51-100	9	OUT-DPT	20
	2-	11	9	11	Q >5	0	T-	0	S-	0	21-30	7	101-150	3		
	3-	2	5	5	S1-2	3	A-	0	C-	0	31-40	6	151-200	3		
	4-	2	2	2	S3-4	19	E-	0			41-50	2	>200	1		
					S >5	0	I-	0			> 50	3	TOTAL	2086	TOTAL	22

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                                                  SUMMARY BY CCURSE TYPE
GROUP (                      10000-19999)         CONTINUED
                           NUMBER  OF  TERMS          CR HCURS                            **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
COURSE DESCRIPTION             OFFERED                QTR AND                                    SECT     * 1976-77   * 1976-77 (THOUS$)
                            76-77 77-78 78-79         SEMESTER   MODE OF OPER         NO.   SIZE      * NO.  FREQ* ON ANC OFF-CAMPUS

ADVANCED COMPUTER           0-   4    0    2      Q1-2    1 L- 12 P-  1    1-10   10      1- 50    19     IN-DPT     22
 ORGANIZATICN               1-  14   17   14      Q3-4   11 R- 10 D-  0   11-20    6     51-100     2     OUT-DPT     7
                            2-   5    5    6      Q >5    0 T-  0 S-  0   21-30    3    101-150     2
                            3-   0    1    1      S1-2    0 A-  0 C-  0   31-40    2    151-200     0
                            4-   0    0    0      S3-4    9 E-  0         41-50    0       >200     0
                                                  S >5    0 I-  0          > 50    2      TOTAL   642     TOTAL      29

INFORMATION STORAGE         0-   3    2    2      Q1-2    1 L-  8 P-  0    1-10    6      1- 50    14     IN-DPT      2
 AND RETRIEVAL              1-  10   11   11      Q3-4    5 R-  9 D-  0   11-20    4     51-100     1     CUT-DPT    17
                            2-   4    3    3      Q >5    2 T-  0 S-  0   21-30    3    101-150     1
                            3-   0    1    1      S1-2    1 A-  0 C-  0   31-40    3    151-200     0
                            4-   0    0    0      S3-4    8 E-  0         41-50    0       >200     1
                                                  S >5    0 I-  0          > 50    1      TOTAL   740     TOTAL      18

COMPUTER GRAPHICS           0-   7    2    6      Q1-2    2 L- 15 P-  0    1-10   12      1- 50    31     IN-DPT      7
                            1-  20   26   21      Q3-4   14 R- 14 D-  0   11-20    7     51-100     0     OUT-DPT     9
                            2-   4    3    4      Q >5    2 T-  0 S-  0   21-30    8    101-150     0
                            3-   1    1    1      S1-2    1 A-  1 C-  2   31-40    5    151-200     0
                            4-   0    0    0      S3-4   13 E-  0         41-50    0       >200     1
                                                  S >5    0 I-  0          > 50    0      TCTAL  1146     TOTAL      16

COMPUTABILITY               0-   5    6    6      Q1-2    1 L- 24 P-  0    1-10   12      1- 50    25     IN-DPT      1
                            1-  17   15   16      Q3-4   14 R-  2 D-  0   11-20   10     51-100     1     OUT-DPT     1
                            2-   5    6    5      Q >5    1 T-  0 S-  0   21-30    2    101-150     0
                            3-   0    0    0      S1-2    0 A-  0 C-  1   31-40    1    151-200     1
                            4-   0    0    0      S3-4   11 E-  0         41-50    1       >200     0
                                                  S >5    0 I-  0          > 50    1      TOTAL   557     TOTAL       1

INTRODUCTORY NUMERICAL      0-   6    4    2      Q1-2    3 L- 52 P-  0    1-10   35      1- 50    65     IN-DPT     19
 ANALYSIS (CR METHCDS)      1-  51   47   52      Q3-4   16 R- 20 D-  0   11-20   19     51-1C0    12     CUT-DPT    43
                            2-  14   18   15      Q >5    1 T-  0 S-  1   21-30   16    101-150     6
                            3-  12   13   14      S1-2    2 A-  5 C-  0   31-40    7    151-200     0
                            4-   0    1    0      S3-4   55 E-  4         41-50    4       >200     0
                                                  S >5    0 I-  1          > 50    2      TOTAL  2540     TOTAL      62

ADVANCED NUMERICAL          0-  17   16   11      Q1-2    1 L- 64 P-  0    1-10   45      1- 50    77     IN-CPT     19
 ANALYSIS                   1-  49   47   53      Q3-4   29 R- 11 D-  0   11-20   22     51-100     3     OUT-DPT     9
                            2-   8   11   10      Q >5    2 T-  0 S-  1   21-30   12    101-150     0
                            3-   6    6    6      S1-2    0 A-  3 C-  0   31-40    0    151-200     0
                            4-   0    0    0      S3-4   42 E-  1         41-50    1       >200     0
                                                  S >5    0 I-  0          > 50    0      TCTAL  1092     TOTAL      28

INTRODUCTORY OPERATIONS     0-   6    1    1      Q1-2    0 L- 26 P-  0    1-10   12      1- 50    28     IN-DPT      1
 RESEARCH                   1-  18   21   22      Q3-4   10 P-  9 D-  0   11-20    9     51-100     3     OUT-DPT     2
                            2-   7    9    8      Q >5    0 T-  0 S-  0   21-30   12    101-15C     3
                            3-   4    4    5      S1-2    0 A-  1 C-  0   31-40    3    151-200     0
                            4-   1    1    0      S3-4   25 E-  0         41-50    0       >200     2
                                                  S >5    0 I-  0          > 50    0      TOTAL  1506     TOTAL       3

ADVANCFD OPERATIONS         0-  10    6    7      Q1-2    0 L- 35 P-  0    1-10   18      1- 50    36     IN-DPT      0
 RESEA CH                   1-  23   27   27      Q3-4   13 R-  4 D-  0   11-20   11     51-100     2     CUT-DPT    40
                            2-   7    7    6      Q >5    0 T-  0 S-  0   21-30    7    101-150     2
                            3-   1    1    1      S1-2    2 A-  1 C-  0   31-40    5    151-200     0
                            4-   0    0    0      S3-4   26 E-  1         41-50    0       >200     1
                                                  S >5    0 I-  0          > 50    0      TOTAL  2349     TOTAL      40

DATA CCMPUNICATIONS         0-   4    4    2      Q1-2    1 L- 15 P-  0    1-10    9      1- 50    22     IN-CPT      5
                            1-  19   18   20      Q3-4   11 R-  7 D-  0   11-20    9     51-100     4     OUT-DPT     6
                            2-   3    4    4      Q >5    3 T-  0 S-  0   21-30    3    101-150     0
                            3-   0    0    0      S1-2    0 A-  2 C-  0   31-40    4    151-200     0
                            4-   0    0    0      S3-4   11 E-  2         41-50    1       >200     0
                                                  S >5    0 I-  0          > 50    0      TOTAL   592     TOTAL      10

PROCESS CONTROL             0-   3    3    0      Q1-2    0 L-  3 P-  0    1-10    4      1- 50    13     IN-DPT      1
                            1-   6    6    8      Q3-4    4 R- 12 D-  0   11-20    8     51-100     2     OUT-DPT     0
                            2-   4    3    4      Q >5    0 T-  0 S-  0   21-30    2    101-150     0
                            3-   1    2    2      S1-2    0 A-  0 C-  0   31-40    1    151-200     0
                            4-   0    1    1      S3-4   10 E-  0         41-50    0       >200     0
                                                  S >5    1 I-  0          > 50    0      TOTAL   249     TOTAL       1

DATA PREPARATION (KEY       0-   0    0    0      Q1-2    0 L-  0 P-  4    1-10    2      1- 50     1     IN-DPT      0
 PUNCH, VERIFIER, CATA      1-   2    0    0      Q3-4    1 R-  8 D-  0   11-20    5     51-100     4     CUT-DPT     4
 ENTRY,...)                 2-   1    3    1      Q >5    0 T-  0 S-  0   21-30    3    101-15C     5
                            3-   4    5    7      S1-2    5 A-  0 C-  0   31-40    2    151-200     2
                            4-   4    3    3      S3-4    6 E-  0         41-50    0       >200     0
                                                  S >5    0 I-  0          > 50    0      TOTAL  1215     TOTAL       4

UNIT RECCRC (EAM)           0-   1    0    0      Q1-2    0 L-  0 P-  0    1-10    1      1- 50     2     IN-CPT      0
                            1-   1    1    1      Q3-4    1 R-  3 D-  0   11-20    2     51-10C     1     OUT-DPT     0
                            2-   0    0    1      Q >5    0 T-  0 S-  0   21-30    0    101-150     0
                            3-   1    2    1      S1-2    0 A-  0 C-  0   31-40    0    151-20C     0
                            4-   0    0    0      S3-4    2 E-  0         41-50    0       >200     0
                                                  S >5    0 I-  0          > 50    0      TOTAL   150     TOTAL       0
                                                  SUMMARY BY COURSE TYPE
   GROUP (            10000-19999)               CONTINUED
                    NUMBER  OF  TERMS              CR HCURS                        **  AVERAGE ** *ENRCLLMENT* COST COMPUTER SVCS
COURSE DESCRIPTICN       OFFERED                   QTR AND                                 SECT   * 1976-77  * 1976-77 (THOUS$)
                    76-77 77-78 78-79              SEMESTER    MCDE OF OPER       NO.    SIZE   * NO.  FREQ* ON AND OFF-CAMPUS

INTRODUCTORY COURSE     0-   5     4     3         Q1-2    1  L-  26 P-   0   1-10     13      1- 50    28      IN-DPT    205
 IN DATA PRCCESSING     1-  17    14    13         Q3-4   13  R-  38 D-   0  11-20     13     51-100     8      OUT-DPT   114
                        2-  14    15    16         Q >5    2  T-   0 S-   1  21-30     24    101-150     5
                        3-  34    36    38         S1-2    7  A-   4 C-   0  31-40     18    151-200     3
                        4-  11    12    11         S3-4   51  E-  10           41-50      9       >200    38
                                                   S >5    3  I-   3           > 50      5      TOTAL 25533      TOTAL      319

ACVANCED COURSE IN DATA 0-   4     4     4         Q1-2    0  L-   7 P-   0   1-10     11      1- 50    17      IN-DPT      0
 PROCESSING             1-   8     9     9         Q3-4    8  R-  11 D-   0  11-20  [illegible] 51-100     2      OUT-DPT     5
                        2-   6     5     5         Q >5    0  T-   0 S-   1  21-30  [illegible] 101-150    0
                        3-   5     5     5         S1-2    2  A-   0 C-   0  31-40      2    151-200     3
                        4-   1     1     1         S3-4   12  E-   0           41-50      0       >200     2
                                                   S >5    0  I-   5           > 50      0      TOTAL  1642      TOTAL        5

PROBLEM SCLVING COURSE  0-   5     2     4         Q1-2    0  L-  13 P-   0   1-10     16      1- 50    30      IN-DPT      0
 IN BUSINESS APPLI-     1-  22    25    23         Q3-4    1  R-  19 D-   0  11-20      7     51-100     4      OUT-DPT   172
 CATIONS                2-  10    10    10         Q >5    1  T-   0 S-   2  21-30     16    101-15C     2
                        3-  11    11    11         S1-2    0  A-   9 C-   0  31-40      5    151-20C     2
                        4-   0     0     0         S3-4   45  E-   2           41-50      4       >200    10
                                                   S >5    1  I-   3           > 50      0      TOTAL  6358      TOTAL      172

ADVANCED BUSINESS APPLI-0-   4     4     2         Q1-2    0  L-  10 P-   0   1-10      9      1- 50    19      IN-DPT      0
 CATIONS (MARKETING,    1-  13    13    15         Q3-4    5  R-   7 D-   0  11-20      8     51-100     3      OUT-DPT     8
 FINANCE, PRODUCTION,   2-   4     3     3         Q >5    0  T-   0 S-   1  21-30      6    101-150     3
 ETC.)                  3-   4     5     5         S1-2    1  A-   2 C-   0  31-40      2    151-200     0
                        4-   1     1     1         S3-4   19  E-   1           41-50      1       >200     1
                                                   S >5    0  I-   5           > 50      0      TOTAL  1222      TOTAL        8

INTRODUCTORY SYSTEMS    0-   3     0     0         Q1-2    0  L-  17 P-   0   1-1C      5      1- 50    21      IN-CPT      4
 ANALYSIS (BUSINESS)    1-  18    20    20         Q3-4   17  R-  12 D-   0  11-20     13     51-10C    10      OUT-DPT     6
                        2-   7     7     7         Q >5    1  T-   0 S-   0  21-30     10    101-150     2
                        3-   2     2     2         S1-2    0  A-   6 C-   0  31-40      7    151-200     1
                        4-   7     8     8         S3-4   19  E-   2           41-50      1       >200     3
                                                   S >5    0  I-   0           > 50      1      TCTAL  2966      TOTAL       10

LARGE SCALE INFORMATION 0-   1     0     0         Q1-2    1  L-   2 P-   0   1-10      1      1- 50     4      IN-DPT      1
 PROCESSING SYSTEMS     1-   2     3     2         Q3-4    1  R-   1 D-   0  11-20      2     51-100     1      OUT-DPT     7
                        2-   2     2     3         Q >5    0  T-   0 S-   0  21-30      2    101-150     0
                        3-   0     0     0         S1-2    0  A-   0 C-   0  31-40      0    151-200     0
                        4-   0     0     0         S3-4    3  E-   1           41-50      0       >200     0
                                                   S >5    0  I-   1           > 50      0      TOTAL   155      TOTAL        7

FILE ORGANIZATION       0-   2     2     0         Q1-2    0  L-  11 P-   0   1-10      5      1- 50    16      IN-DPT      9
                        1-  11    10    11         Q3-4    5  R-   4 D-   0  11-20      3     51-100     0      OUT-DPT     3
                        2-   3     4     5         Q >5    2  T-   0 S-   0  21-30      4    101-150     0
                        3-   0     0     0         S1-2    0  A-   1 C-   0  31-40      4    151-200     0
                        4-   0     0     0         S3-4    9  E-   0           41-50      0       >200     0
                                                   S >5    0  I-   0           > 50      0      TOTAL   339      TOTAL       12

DATA BASE MANAGEMENT    0-   8     5     0         Q1-2    1  L-  24 P-   0   1-10     10      1- 50    30      IN-DPT     32
                        1-  22    24    27         Q3-4   17  R-  10 D-   0  11-20     12     51-100     6      CUT-DPT    10
                        2-   5     6     9         Q >5    0  T-   0 S-   0  21-30     10    101-150     1
                        3-   1     1     0         S1-2    0  A-   1 C-   0  31-40      1    151-200     0
                        4-   1     1     1         S3-4   18  E-   2           41-50      2       >200     0
                                                   S >5    0  I-   0           > 50      2      TCTAL  1008      TOTAL       41

INFORMATION SYSTEMS     0-   7     0     2         Q1-2    1  L-  16 P-   0   1-10      8      1- 50    26      IN-CPT      3
 DESIGN (INTRODUCTORY)  1-  15    21    19         Q3-4   13  R-  15 D-   0  11-20     11     51-100     6      OUT-DPT     6
                        2-   7     8     6         Q >5    1  T-   0 S-   1  21-30     10    101-150     1
                        3-   5     5     7         S1-2    0  A-   1 C-   0  31-40      4    151-200     1
                        4-   0     0     0         S3-4   18  E-   0           41-50      0       >200     0
                                                   S >5    0  I-   1           > 50      1      TOTAL  1188      TOTAL        9

INFORMATION SYSTEMS     0-   5     1     1         Q1-2    1  L-  14 P-   1   1-10     12      1- 50    25      IN-DPT      3
 DESIGN (ADVANCED)      1-  18    19    18         Q3-4   13  R-  13 D-   0  11-20      8     51-100     4      OUT-CPT    19
                        2-   6     9     7         Q >5    0  T-   0 S-   1  21-30      7    101-15C     0
                        3-   1     1     4         S1-2    0  A-   1 C-   0  31-40      1    151-200     1
                        4-   0     0     0         S3-4   14  E-   0           41-50      1       >20C     0
                                                   S >5    0  I-   0           > 50      1      TOTAL   822      TOTAL       22

MANAGEMENT INFORMATION  0-   3     2     2         Q1-2    0  L-  12 P-   0   1-10      7      1- 50    24      IN-DPT      5
 SYSTEMS                1-  17    20    19         Q3-4   10  R-   5 D-   0  11-20      8     51-100     1      CUT-DPT    13
                        2-   5     2     3         Q >5    0  T-   0 S-   2  21-30      7    101-150     1
                        3-   0     2     2         S1-2    0  A-   7 C-   0  31-40      4    151-200     0
                        4-   1     0     0         S3-4   15  E-   0           41-50      0       >20C     0
                                                   S >5    0  I-   0           > 50      0      TOTAL   622      TOTAL       18

MANAGEMENT CF COMPUTER  0-   6     2     2         Q1-2    0  L-  15 P-   1   1-10     11      1- 50    17      IN-DPT      3
 CENTERS OF INFORMATION 1-   9    12    10         Q3-4    8  R-   3 D-   0  11-20      6     51-100     4      OUT-DPT     1
  PROCESSING DEPARTMENTS 2-  5     5     7         Q >5    0  T-   0 S-   1  21-30      2    101-150     1
                        3-   2     3     3         S1-2    1  A-   2 C-   0  31-40      1    151-20C     0
                        4-   0     0     0         S3-4   11  E-   0           41-50      2       >200     0
                                                   S >5    0  I-   0           > 50      0      TCTAL   601      TOTAL        4
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INVENTORY OF COMPUTERS, APPLICATICNS OF COMPUTERS, AND INSTRUCTIONAL PRCGRAMS IN U.S. HIGHER EDUCATICN FOR 1976-77
                CONCUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                          UNDER A GRANT FROM THE NATIONAL SCIENCE FCUNDATION

                                              SUMMARY BY COURSE TYPE
   GROUP (                 10000-19999)        GCNTINUED
                           NUMBER  OF  TERMS        CR HOURS                                 **  AVERAGE ** *ENRCLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTION             OFFERED             QTR AND                                      SECT       * 1976-77  * 1976-77 (THOUS$)
                           76-77 77-78 78-79        SEMESTER   MCDE CF OPER        NO.       SIZE       * NO.  FREQ* ON AND OFF-CAMPUS

COMPUTERS AND ACCCUNTING 0-    2     1     0        Q1-2     0  L-   3 P-   0    1-10       0         1- 50    7        IN-CPT      0
 (INCLUDING AUDITING)    1-    1     2     2        Q3-4     1  R-   2 D-   0   11-20       2        51-100    0        OUT-DPT     2
                         2-    3     3     4        Q >5     0  T-   0 S-   0   21-30       4       101-150    1
                         3-    2     2     2        S1-2     2  A-   0 C-   0   31-40       2       151-200    0
                         4-    0     0     0        S3-4     5  E-   2           41-50       0          >200    0
                                                    S >5     0  I-   1            > 50       0         TOTAL  320        TOTAL       2

ECONOMETRIC SIMULATION   0-    0     0     0        Q1-2     0  L-   4 P-   0    1-10       6         1- 50    9        IN-DPT      0
 APPLICATIONS            1-    7     7     7        Q3-4     2  R-   2 D-   0   11-20       1        51-100    0        OUT-DPT     0
                         2-    2     2     2        Q >5     0  T-   0 S-   1   21-30       2       101-150    0
                         3-    0     0     0        S1-2     0  A-   2 C-   0   31-40       0       151-200    0
                         4-    0     0     0        S3-4     7  E-   0           41-50       0          >200    0
                                                    S >5     0  I-   0            > 50       0         TOTAL   95        TOTAL       0

INSTRUCTIONAL SYSTEMS    0-    0     0     0        Q1-2     0  L-   0 P-   0    1-10       1         1- 50    2        IN-DPT      2
                         1-    0     0     0        Q3-4     2  R-   2 D-   0   11-20       0        51-100    0        OUT-DPT     2
                         2-    2     2     2        Q >5     0  T-   0 S-   0   21-30       1       101-150    0
                         3-    0     0     0        S1-2     0  A-   0 C-   0   31-40       0       151-200    0
                         4-    0     0     0        S3-4     0  E-   0           41-50       0          >200    0
                                                    S >5     0  I-   0            > 50       0         TOTAL   38        TOTAL       4

COMPUTER BASEC           0-    1     1     0        Q1-2     0  L-   7 P-   0    1-10       5         1- 50   13        IN-DPT      5
INSTRUCTION              1-    9     9    10        Q3-4     9  R-   7 D-   0   11-20       6        51-100    1        OUT-DPT     4
                         2-    4     4     4        Q >5     0  T-   0 S-   0   21-30       3       101-150    1
                         3-    0     0     0        S1-2     0  A-   0 C-   0   31-40       1       151-200    0
                         4-    1     1     1        S3-4     6  E-   1           41-50       0          >200    0
                                                    S >5     0  I-   0            > 50       0         TOTAL  317        TOTAL       9

OTHER                    0-   58    46    42        Q1-2    40  L- 126 P-   9    1-10     179         1- 50  269        IN-DPT     47
                         1-  109   125   121        Q3-4    82  R-  55 D-   6   11-20      68        51-100   28        OUT-DPT   103
                         2-   61    57    63        Q >5    29  T-   0 S-  24   21-30      39       101-150    5
                         3-   46    46    48        S1-2    29  A-   2 C-   0   31-40       7       151-200    0
                         4-   32    32    32        S3-4   111  E-   6           41-50       5          >200    4
                                                    S >5     2  I-  78            > 50       8         TOTAL 8081        TOTAL     150

DESCRIPTION NOT CODED    0-   10    46    49        Q1-2    13  L- 116 P-   0    1-10      47         1- 50   84        IN-DPT      0
                         1-   41    25    25        Q3-4    10  R-  15 D-   0   11-20      38        51-100   22        OUT-DPT    17
                         2-   47    43    39        Q >5     1  T-   0 S-   0   21-30      38       101-150    9
                         3-   21    14    15        S1-2    12  A-   2 C-   0   31-40       8       151-200    6
                         4-   15     8     8        S3-4    99  E-   0           41-50       2          >200   15
                                                    S >5     1  I-   3            > 50       3         TOTAL 12832       TOTAL      17
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SUMMARY BY COURSE TYPE

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 GROUP 1                    (ABOVE 20000)
                          NUMBER  OF  TERMS       CR HOURS                         **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTION            OFFERED            QTR AND                                  SECT    * 1976-77  * 1976-77 (THCUS$)
                          76-77 77-78 78-79       SEMESTER   MODE OF OPER        NO.     SIZE    * NO.  FREQ* ON AND OFF-CAMPUS

 COMPUTER APPRECIATION    0-   2     2     3      Q1-2    2  L-  19 P-   0   1-10     6         1- 50   16      IN-OPT      1
                          1-   7    11    10      Q3-4    4  R-   9 C-   0  11-20     6        51-100    3      OUT-OPT    12
                          2-  15    10    10      Q >5    1  T-   1 S-   0  21-30     7       101-150    4
                          3-   7     8     8      S1-2    5  A-   4 C-   0  31-40     4       151-200    2
                          4-   4     4     4      S3-4   23  E-   2           41-50     1          >200   10
                                                  S >5    0  I-   0            > 50    11         TOTAL 5527      TOTAL      13

 PROBLEM SOLVING COURSE   0-   1     4    16      Q1-2    0  L-  19 P-   0   1-10     6         1- 50   20      IN-OPT      1
  IN THE HUMANITIES       1-  15    11     3      Q3-4    7  R-   7 D-   0  11-20     9        51-100    1      OUT-OPT    20
                          2-   6     7     4      Q >5    0  T-   0 S-   0  21-30     5       101-150    0
                          3-   3     4     2      S1-2    1  A-   0 C-   0  31-40     0       151-200    1
                          4-   1     0     1      S3-4   18  E-   0           41-50     2          >200    4
                                                  S >5    0  I-   0            > 50     4         TOTAL 2166      TOTAL      20

 INTRODUCTORY COURSE IN   0-  10    10    15      Q1-2    4  L-  48 P-   0   1-10    10         1- 50   34      IN-OPT      1
  SOME COMPILER LANGUAGE  1-  15    18    18      Q3-4   27  R-  82 D-   0  11-20    26        51-100   22      OUT-OPT   365
  SUCH AS FORTRAN, PL/1,  2-  29    29    26      Q >5    4  T-   0 S-   0  21-30    34       101-150   10
  BASIC, ALGOL            3-  50    46    47      S1-2   25  A-   0 C-   1  31-40    25       151-200   10
                          4-  31    32    29      S3-4   71  E-   4           41-50    16          >200   60
                                                  S >5    0  I-   1            > 50    25         TOTAL 48541     TOTAL     367

 INTRODUCTORY COURSE IN A 0-   1     1     2      Q1-2    1  L-  20 P-   2   1-10     2         1- 50   13      IN-OPT      1
  LANGUAGE SUCH AS COBOL  1-  12    10    10      Q3-4   10  R-  23 D-   0  11-20     7        51-100    9      OUT-OPT    80
                          2-  14    18    17      Q >5    2  T-   0 S-   0  21-30    17       101-150    8
                          3-  16    14    14      S1-2    6  A-   1 C-   0  31-40    14       151-200    7
                          4-   6     6     6      S3-4   28  E-   1           41-50     4          >200   12
                                                  S >5    0  I-   2            > 50     5         TOTAL 12130     TOTAL      81

 PROBLEM SOLVING COURSE   0-   2     7    14      Q1-2    6  L-  43 P-   4   1-10    13         1- 50   57      IN-OPT      3
  IN ENGINEERING OR       1-  44    38    37      Q3-4   12  R-  29 D-   2  11-20    33        51-100   15      OUT-OPT    44
  SCIENTIFIC APPLI-       2-  30    34    28      Q >5    1  T-   0 S-   4  21-30    23       101-150    3
  CATIONS                 3-   6     4     4      S1-2    7  A-   0 C-   0  31-40     6       151-200    4
                          4-   2     1     1      S3-4   42  E-   1           41-50     4          >200    5
                                                  S >5    0  I-   1            > 50     5         TOTAL 5557      TOTAL      47

 INTRODUCTORY COURSE IN   0-   4    12    19      Q1-2    0  L-  36 P-   2   1-10    10         1- 50   29      IN-OPT    137
  PROGRAMMING             1-  26    21    17      Q3-4   18  R-  39 D-   0  11-20    13        51-100   10      OUT-OPT   489
                          2-  25    23    20      Q >5    0  T-   0 S-   1  21-30    23       101-150    8
                          3-  24    22    19      S1-2    7  A-   3 C-   0  31-40    12       151-200    6
                          4-   9    10    13      S3-4   59  E-   7           41-50    12          >200   35
                                                  S >5    0  I-   0            > 50    18         TOTAL 24364     TOTAL     626

 ADVANCED COURSE IN       0-  13    12    17      Q1-2    1  L-  38 P-   1   1-10    22         1- 50   70      IN-OPT     57
  PROGRAMMING             1-  45    43    40      Q3-4   22  R-  58 D-   0  11-20    36        51-100   17      OUT-OPT   256
                          2-  28    29    24      Q >5    3  T-   0 S-   1  21-30    26       101-150    8
                          3-  22    22    25      S1-2    3  A-   2 C-   0  31-40    16       151-200    7
                          4-   5     7     7      S3-4   79  E-   7           41-50     3          >200   11
                                                  S >5    3  I-   6            > 50    10         TOTAL 8909      TOTAL     313

 FIRST COURSE IN COMPUTER 0-   4     2     4      Q1-2    1  L-  21 P-   4   1-10     2         1- 50   16      IN-OPT      0
  DESIGN                  1-  10    11     9      Q3-4   10  R-  11 D-   0  11-20     7        51-100    8      OUT-OPT     1
                          2-  11    12    12      Q >5    2  T-   0 S-   0  21-30    11       101-150    5
                          3-  12    11    12      S1-2    2  A-   1 C-   0  31-40     9       151-200    3
                          4-   0     1     0      S3-4   22  E-   0           41-50     6          >200    5
                                                  S >5    0  I-   0            > 50     2         TOTAL 4124      TOTAL       1

 ADVANCED COURSE IN COM-  0-  11     7    12      Q1-2    0  L-  35 P-   5   1-10    22         1- 50   56      IN-OPT      0
  PUTER DESIGN (COMPUTER  1-  41    43    39      Q3-4   15  R-  20 D-   0  11-20    15        51-100    8      OUT-OPT    20
  ARCHITECTURE)           2-   9    11    11      Q >5    1  T-   0 S-   6  21-30    19       101-150    2
                          3-   7     7     6      S1-2    3  A-   1 C-   0  31-40     6       151-200    2
                          4-   0     0     0      S3-4   49  E-   1           41-50     3          >200    0
                                                  S >5    0  I-   0            > 50     3         TOTAL 2159      TOTAL      20

 PROGRAMMING LANGUAGES    0-  13    11    12      Q1-2    1  L-  54 P-   0   1-10    19         1- 50   46      IN-OPT     15
  (STRUCTURE, ETC.)       1-  28    29    29      Q3-4   14  R-  15 D-   0  11-20     8        51-100   16      OUT-OPT    86
                          2-  19    22    22      Q >5    3  T-   0 S-   3  21-30    22       101-150    6
                          3-  13    11    10      S1-2    1  A-   1 C-   0  31-40    10       151-200    3
                          4-   1     1     1      S3-4   54  E-   0           41-50    11          >200    3
                                                  S >5    0  I-   1            > 50     4         TOTAL 4022      TOTAL     101

 OPERATING SYSTEMS        0-  18    21    17      Q1-2    2  L-  82 P-   0   1-10    31         1- 50   92      IN-OPT    128
  (SYSTEMS PROGRAMMING,   1-  59    51    56      Q3-4   34  R-  32 D-   0  11-20    36        51-100   12      OUT-OPT    80
   ETC.)                  2-  31    36    35      Q >5    4  T-   0 S-   2  21-30    27       101-150   13
                          3-  11    11    11      S1-2    2  A-   3 C-   0  31-40    15       151-200    3
                          4-   3     3     3      S3-4   77  E-   2           41-50     9          >200    2
                                                  S >5    1  I-   1            > 50     4         TOTAL 5062      TOTAL     209

 DATA STRUCTURES          0-   7     8     8      Q1-2    0  L-  39 P-   0   1-10     7         1- 50   32      IN-OPT     16
                          1-  20    19    18      Q3-4   16  R-  15 D-   0  11-20    13        51-100   11      OUT-OPT    94
                          2-  21    18    18      Q >5    3  T-   0 S-   1  21-30    16       101-150    7
                          3-  11    14    15      S1-2    0  A-   3 C-   0  31-40    13       151-200    6
                          4-   0     0     0      S3-4   38  E-   1           41-50     8          >200    3
                                                  S >5    0  I-   0            > 50     2         TOTAL 4088      TOTAL     110
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                                                 SUMMARY BY COURSE TYPE
  GROUP (                     ABOVE 20000)       CONTINUED
                             NUMBER  OF  TERMS        CR HOURS                          **  AVERAGE **  *ENROLLMENT* COST COMPUTER SVCS
  COURSE DESCRIPTION              OFFERED             QTR AND                                   SECT     * 1976-77  * 1976-77 (THOUS$)
                             76-77 77-78 78-79        SEMESTER     MODE OF OPER         NO.    SIZE     * NO.  FREQ* ON AND OFF-CAMPUS

 AUTOMATA THEORY              0-  13     7     7       Q1-2    0  L-  43 P-   0    1-10    17        1- 50   40      IN-DPT     0
                              1-  19    26    27       Q3-4   14  R-   4 D-   0   11-20    15       51-100    5      OUT-DPT    7
                              2-  14    13    12       Q >5    2  T-   0 S-   0   21-30    10      101-150    2
                              3-   2     2     2       S1-2    0  A-   0 C-   0   31-40     3      151-200    1
                              4-   0     0     0       S3-4   32  E-   1          41-50     2         >200    0
                                                       S >5    0  I-   0           > 50     1        TOTAL 1375      TOTAL      7

 SIMULATION APPLICATIONS      0-   5     4     7       Q1-2    0  L-  22 P-   0    1-10    12        1- 50   27      IN-DPT     3
  (NON-ECONOMETRIC)           1-  22    22    19       Q3-4    7  R-   6 D-   0   11-20     8       51-100    3      OUT-DPT   10
                              2-   3     4     4       Q >5    1  T-   0 S-   0   21-30     7      101-150    0
                              3-   0     0     0       S1-2    2  A-   1 C-   0   31-40     2      151-200    0
                              4-   0     0     0       S3-4   20  E-   0          41-50     1         >200    0
                                                       S >5    0  I-   1           > 50     0        TOTAL  619      TOTAL     14

 SIMULATION LANGUAGES         0-   8     6     5       Q1-2    0  L-  20 P-   0    1-10     8        1- 50   27      IN-DPT     7
  AND/OR TECHNIQUES           1-  18    21    22       Q3-4    5  R-   6 D-   0   11-20    12       51-100    3      OUT-DPT   30
                              2-   3     2     2       Q >5    0  T-   0 S-   2   21-30     6      101-150    0
                              3-   1     1     1       S1-2    0  A-   2 C-   0   31-40     2      151-200    0
                              4-   0     0     0       S3-4   23  E-   0          41-50     0         >200    0
                                                       S >5    0  I-   0           > 50     2        TOTAL  610      TOTAL     37

 ARTIFICIAL INTELLIGENCE      0-  17    21    17       Q1-2    0  L-  56 P-   0    1-10    37        1- 50   72      IN-DPT     1
  (HEURISTIC PROGRAMMING)     1-  45    40    44       Q3-4   10  R-   6 D-   0   11-20    24       51-100    2      OUT-DPT   20
                              2-  10    12    12       Q >5    1  T-   0 S-   8   21-30     8      101-150    0
                              3-   2     1     1       S1-2    2  A-   2 C-   0   31-40     4      151-200    0
                              4-   0     0     0       S3-4   60  E-   0          41-50     0         >200    0
                                                       S >5    0  I-   2           > 50     1        TOTAL  987      TOTAL     21

 HYBRID COMPUTERS             0-   1     1     1       Q1-2    0  L-   3 P-   0    1-10     3        1- 50    7      IN-DPT     0
                              1-   4     4     4       Q3-4    2  R-   4 D-   0   11-20     3       51-100    0      OUT-DPT    0
                              2-   1     1     1       Q >5    0  T-   0 S-   0   21-30     1      101-150    0
                              3-   1     1     1       S1-2    0  A-   0 C-   0   31-40     0      151-200    0
                              4-   0     0     0       S3-4    5  E-   0          41-50     0         >200    0
                                                       S >5    0  I-   0           > 50     0        TOTAL  120      TOTAL      0

 DISCRETE STRUCTURES          0-   5     4     5       Q1-2    1  L-  30 P-   0    1-10     4        1- 50   18      IN-DPT     0
                              1-  12    13    11       Q3-4    4  R-   1 D-   0   11-20     8       51-100    9      OUT-DPT   13
                              2-   9    10    11       Q >5    0  T-   0 S-   1   21-30     8      101-150    4
                              3-   7     6     6       S1-2    3  A-   1 C-   0   31-40     6      151-200    1
                              4-   0     0     0       S3-4   25  E-   0          41-50     4         >200    1
                                                       S >5    0  I-   0           > 50     3        TOTAL 1980      TOTAL     13

 COMPUTER ORGANIZATION        0-   3     9     5       Q1-2    1  L-  25 P-   3    1-10     8        1- 50   27      IN-DPT     0
                              1-  23    16    20       Q3-4   10  R-   7 D-   0   11-20    12       51-100    6      OUT-DPT   24
                              2-   8     7     6       Q >5    3  T-   0 S-   0   21-30     6      101-150    2
                              3-   2     4     5       S1-2    1  A-   1 C-   0   31-40     7      151-200    0
                              4-   0     0     0       S3-4   19  E-   0          41-50     2         >200    1
                                                       S >5    0  I-   0           > 50     1        TOTAL 1421      TOTAL     25

 SWITCHING THEORY             0-   3     3     0       Q1-2    0  L-  22 P-   1    1-10     7        1- 50   24      IN-DPT     0
                              1-  21    21    24       Q3-4    7  R-  10 D-   0   11-20    13       51-100    5      OUT-DPT    1
                              2-   5     6     5       Q >5    0  T-   0 S-   0   21-30     6      101-150    2
                              3-   3     3     4       S1-2    1  A-   0 C-   0   31-40     3      151-200    1
                              4-   1     0     0       S3-4   24  E-   0          41-50     0         >200    1
                                                       S >5    0  I-   0           > 50     4        TOTAL 1437      TOTAL      1

 SEQUENTIAL MACHINES          0-   0     2     0       Q1-2    0  L-   7 P-   0    1-10     0        1- 50    5      IN-DPT     0
                              1-   5     3     5       Q3-4    2  R-   1 D-   0   11-20     4       51-100    3      OUT-DPT    1
                              2-   3     3     3       Q >5    0  T-   0 S-   0   21-30     2      101-150    0
                              3-   0     0     0       S1-2    0  A-   0 C-   0   31-40     2      151-200    0
                              4-   0     0     0       S3-4    6  E-   0          41-50     0         >200    0
                                                       S >5    0  I-   0           > 50     0        TOTAL  341      TOTAL      1

 COMPILER CONSTRUCTION        0-  13    13    13       Q1-2    1  L-  39 P-   0    1-10    17        1- 50   51      IN-DPT     7
                              1-  37    37    37       Q3-4   17  R-  16 D-   0   11-20    15       51-100    5      OUT-DPT   83
                              2-   7     7     7       Q >5    0  T-   0 S-   1   21-30    14      101-150    2
                              3-   1     1     1       S1-2    0  A-   1 C-   0   31-40    10      151-200    0
                              4-   0     0     0       S3-4   39  E-   1          41-50     2         >200    0
                                                       S >5    0  I-   0           > 50     0        TOTAL 1550      TOTAL     90

 FORMAL LANGUAGES AND         0-   9     7     9       Q1-2    1  L-  33 P-   0    1-10    15        1- 50   39      IN-DPT     0
  SYNTACTIC ANALYSIS          1-  28    28    28       Q3-4   12  R-   3 D-   0   11-20    16       51-100    2      OUT-DPT   13
                              2-   4     5     4       Q >5    1  T-   0 S-   1   21-30     7      101-150    0
                              3-   0     1     0       S1-2    0  A-   2 C-   0   31-40     3      151-200    0
                              4-   0     0     0       S3-4   26  E-   2          41-50     0         >200    0
                                                       S >5    0  I-   0           > 50     0        TOTAL  690      TOTAL     13

 INTRODUCTORY COMPUTER        0-   1     6     5       Q1-2    1  L-  18 P-   2    1-10     2        1- 50    9      IN-DPT     0
  ORGANIZATION                1-  12     7     7       Q3-4   11  R-   7 D-   0   11-20     4       51-100    9      OUT-DPT   22
                              2-   9    10    11       Q >5    1  T-   0 S-   0   21-30     7      101-150    4
                              3-   5     4     4       S1-2    1  A-   0 C-   0   31-40     8      151-200    3
                              4-   1     1     1       S3-4   13  E-   1          41-50     4         >200    3
                                                       S >5    0  I-   0           > 50     3        TOTAL 2865      TOTAL     22
  INVENTCRY OF COMPUTERS, APPLICATICNS OF COMPUTERS, ANC INSTRUCTIONAL PROGRAPS IN U.S. HIGHER EDUCATICN FOR 1976-77
                  CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY  OF MISSOURI-ROLLA
                               UNDER A GRANT FROM THE NATIONAL SCIENCE FCUNDATICN                                  PAGE X-58

                                                  SUMMARY BY CCURSE TYPE
     GROUP I                  ABOVE 20000)         CONTINUED
                             NUMBER  OF  TERMS               CR HOURS                            **  AVERAGE ** *EARCLLMENT* CCST COMPUTER SVCS
  COURSE DESCRIPTION              OFFERED                    QTR AND                                     SECT    * 1976-77  * 1976-77 (THOUS$)
                              76-77 77-78 78-79              SEMESTER    MODE CF OPER      NO.   SIZE       * NO.  FREQ* ON AND OFF-CAMPUS

  ADVANCED CCMPUTER           0-   6    0    4               Q1-2    0  L-  18 P-   0   1-10    8        1- 50   24        IN-CPT      0
   ORGANIZATICN               1-  13   20   15               Q3-4    4  R-   1 D-   0  11-20    5       51-100    2       OUT-DPT     14
                              2-   7    6    7               Q >5    0  T-   0 S-   2  21-30    8      101-150    0
                              3-   0    0    0               S1-2    0  A-   2 C-   0  31-40    2      151-2CC    0
                              4-   0    0    0               S3-4   22  E-   3         41-50    1         >200    0
                                                             S >5    0  I-   0          > 50    2        TOTAL  567       TOTAL       14

  INFORMATION STORAGE         0-   6    5    4               Q1-2    1  L-  12 P-   0   1-10    9        1- 50   17        IN-DPT     39
   AND RETRIEVAL              1-   9    8   10               Q3-4    5  R-   5 D-   0  11-20    5       51-100    1       OUT-DPT     12
                              2-   4    6    5               Q >5    3  T-   0 S-   0  21-30    2      101-150    1
                              3-   0    0    0               S1-2    0  A-   2 C-   0  31-40    2      151-200    1
                              4-   1    1    1               S3-4   11  E-   1         41-50    1         >200    0
                                                             S >5    0  I-   0          > 50    1        TOTAL  592       TOTAL       51

  COMPUTER GRAPHICS           0-   8    6    6               Q1-2    1  L-  17 P-   0   1-10   12        1- 50   29        IN-DPT      1
                              1-  16   18   18               Q3-4    7  R-   7 D-   0  11-20   14       51-10C    1       OUT-DPT     19
                              2-   5    5    5               Q >5    0  T-   0 S-   1  21-30    4      101-150    0
                              3-   1    1    1               S1-2    1  A-   2 C-   0  31-40    0      151-200    0
                              4-   0    0    0               S3-4   21  E-   2         41-50    0         >20C    0
                                                             S >5    0  I-   1          > 50    0        TOTAL  450       TOTAL       20

  COMPUTABILITY               0-  13   10   10               Q1-2    0  L-  35 P-   0   1-10   23        1- 50   41        IN-DPT      0
                              1-  23   26   27               Q3-4    8  R-   3 D-   0  11-20   13       51-100    2       OUT-DPT      2
                              2-   7    7    6               Q >5    0  T-   0 S-   3  21-30    6      101-150    1
                              3-   1    1    1               S1-2    1  A-   1 C-   0  31-40    1      151-200    0
                              4-   0    0    0               S3-4   35  E-   1         41-50    1         >200    0
                                                             S >5    0  I-   1          > 50    0        TOTAL  666       TOTAL        2

  INTRODUCTORY NUMERICAL      0-   5    3   11               Q1-2    0  L-  51 P-   1   1-10    6        1- 50   41        IN-DPT     13
   ANALYSIS (OR METHODS)      1-  32   32   26               Q3-4    8  R-   3 D-   0  11-20   19       51-100   11       CUT-DPT     33
                              2-  16   19   17               Q >5    3  T-   0 S-   0  21-30   15      101-150    2
                              3-   4    3    3               S1-2    2  A-   3 C-   0  31-40   12      151-200    2
                              4-   2    2    2               S3-4   44  E-   1         41-50    3         >200    3
                                                             S >5    1  I-   0          > 50    4        TOTAL 2967       TOTAL       47

  ADVANCED NUMERICAL          0-  14   11   22               Q1-2    2  L-  62 P-   0   1-10   36        1- 50   68        IN-DPT      3
   ANALYSIS                   1-  46   46   37               Q3-4   10  R-   5 D-   0  11-20   21       51-100    4       OUT-DPT     31
                              2-   8   10    8               Q >5    9  T-   0 S-   0  21-30   13      101-150    0
                              3-   4    5    5               S1-2    1  A-   2 C-   0  31-40    2      151-2CC    1
                              4-   1    1    1               S3-4   51  E-   1         41-50    1         >200    0
                                                             S >5    0  I-   3          > 50    0        TOTAL 1349       TOTAL       34

  INTRODUCTORY OPERATIONS     0-   4    5    5               Q1-2    0  L-  15 P-   0   1-10    6        1- 50   12        IN-DPT      0
   RESEARCH                   1-   7    6    6               Q3-4    0  R-   1 D-   0  11-20    2       51-100    2       CUT-DPT      8
                              2-   3    3    3               Q >5    1  T-   0 S-   0  21-30    6      101-150    1
                              3-   1    1    1               S1-2    0  A-   0 C-   0  31-40    0      151-200    0
                              4-   1    1    1               S3-4   14  E-   0         41-50    0         >200    1
                                                             S >5    0  I-   0          > 50    2        TOTAL 2448       TOTAL        8

  ADVANCED OPERATIONS         0-   2    4    6               Q1-2    0  L-  23 P-   0   1-10   11        1- 50   25        IN-DPT      0
   RESEARCH                   1-  22   20   18               Q3-4    0  R-   5 D-   0  11-20   13       51-100    3       CUT-DPT     14
                              2-   2    3    2               Q >5    2  T-   0 S-   0  21-30    2      101-150    1
                              3-   3    2    3               S1-2    1  A-   0 C-   0  31-40    2      151-200    0
                              4-   0    0    0               S3-4   23  E-   0         41-50    1         >200    0
                                                             S >5    0  I-   1          > 50    0        TOTAL  675       TOTAL       14

  DATA COMMUNICATIONS         0-   6    7    2               Q1-2    1  L-  15 P-   0   1-10    5        1- 50   16        IN-DPT      0
                              1-  10    9   14               Q3-4    4  R-   1 D-   0  11-20    7       51-100    0       OUT-DPT      6
                              2-   1    1    1               Q >5    0  T-   0 S-   0  21-30    4      101-150    1
                              3-   0    0    0               S1-2    1  A-   1 C-   0  31-40    1      151-200    0
                              4-   0    0    0               S3-4   11  E-   0         41-50    0         >200    0
                                                             S >5    0  I-   0          > 50    0        TCTAL  347       TOTAL        6

  PROCESS CONTROL             0-   1    2    2               Q1-2    0  L-  11 P-   0   1-10    4        1- 50   11        IN-DPT      2.
                              1-   9    8    8               Q3-4    2  R-   0 D-   0  11-20    5       51-100    0       OUT-DPT      7
                              2-   1    1    1               Q >5    0  T-   0 S-   0  21-30    2      101-150    0
                              3-   0    0    0               S1-2    1  A-   0 C-   0  31-40    0      151-200    0
                              4-   0    0    0               S3-4    7  E-   0         41-50    0         >200    0
                                                             S >5    0  I-   0          > 50    0        TOTAL. 157       TOTAL        9

  DATA PREPARATION (KEY       0-   1    1    1               Q1-2    0  L-   0 P-   0   1-10    2        1- 50    5        IN-DPT      0
   PUNCH, VERIFIER, DATA      1-   2    2    2               Q3-4    0  R-   5 D-   0  11-20    3       51-10C    0       CUT-DPT      0
   ENTRY,...)                 2-   2    2    2               Q >5    0  T-   0 S-   0  21-30    0      101-150    0
                              3-   1    1    1               S1-2    5  A-   0 C-   0  31-40    1      151-200    0
                              4-   0    0    0               S3-4    1  E-   0         41-50    0         >200    1
                                                             S >5    0  I-   1          > 50    0        TOTAL  300       TOTAL        0

  UNIT RECORD (EAM)           0-   0    0    0               Q1-2    0  L-   1 P-   0   1-10    0        1- 5C    0        IN-DPT      0
                              1-   0    0    0               Q3-4    0  R-   0 D-   0  11-20    0       51-10C    1       OUT-DPT      0
                              2-   1    1    1               Q >5    0  T-   0 S-   0  21-30    0      101-150    0
                              3-   0    0    0               S1-2    0  A-   0 C-   0  31-40    0      151-20C    0
                              4-   0    0    0               S3-4    1  E-   0         41-50    1         >200    0
                                                             S >5    0  I-   0          > 50    0        TCTAL  100       TOTAL        0
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                                           SUMMARY BY COURSE TYPE
     GROUP (               ABOVE 20000)     CONTINUED
                          NUMBER  OF  TERMS         CR HOURS                                  **  AVERAGE **  *ENROLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTION           OFFERED               QTR AND                                        SECT      * 1976-77  * 1976-77 (THCUS$)
                          76-77 77-78 78-79         SEMESTER   MODE OF OPER           NO.       SIZE       * NO.  FREQ* ON AND OFF-CAMPUS

INTRODUCTORY COURSE     0-   1     1     1          Q1-2    0  L-   8 P-   0   1-10     1        1- 50    7       IN-DPT      0
 IN DATA PROCESSING     1-   3     3     3          Q3-4    4  R-  15 D-   0  11-20     4       51-100    4       OUT-DPT   141
                        2-   8     7     8          Q >5    0  T-   0 S-   0  21-30     7      101-150    1
                        3-   8     8     8          S1-2    3  A-   2 C-   0  31-40     5      151-200    1
                        4-   8     9     8          S3-4   18  E-   3         41-50     6         >200   15
                                                    S >5    0  I-   0          > 50     5        TOTAL 15354      TOTAL     141

ADVANCED COURSE IN DATA 0-   5     2     3          Q1-2    1  L-  10 P-   0   1-10     3        1- 50   12       IN-DPT      0
 PROCESSING             1-   7     9     8          Q3-4    1  R-  11 D-   0  11-20     6       51-100    5       OUT-DPT    10
                        2-   6     6     6          Q >5    1  T-   0 S-   0  21-30     5      101-150    3
                        3-   5     6     6          S1-2    3  A-   0 C-   0  31-40     2      151-200    3
                        4-   0     0     0          S3-4   15  E-   2         41-50     1         >200    0
                                                    S >5    0  I-   0          > 50     0        TOTAL  1421      TOTAL      10

PROBLEM SOLVING COURSE  0-   5    12    13          Q1-2    1  L-  18 P-   0   1-10    12        1- 50   17       IN-DPT      1
 IN BUSINESS APPLI-     1-  11     7     7          Q3-4   16  R-   9 D-   0  11-20     2       51-100    5       OUT-DPT    66
 CATIONS                2-   5     4     4          Q >5    1  T-   0 S-   0  21-30    10      101-150    3
                        3-   5     2     1          S1-2    0  A-   0 C-   0  31-40     6      151-200    0
                        4-   5     6     6          S3-4   13  E-   1         41-50     0         >200    6
                                                    S >5    0  I-   3          > 50     1        TOTAL  4787      TOTAL      67

ADVANCED BUSINESS APPLI- 0-  2     5     8          Q1-2    2  L-  11 P-   0   1-10     9        1- 50   13       IN-DPT      0
 CATIONS (MARKETING,    1-   5     1     1          Q3-4    4  R-   6 D-   0  11-20     5       51-100    3       OUT-DPT     0
 FINANCE, PRODUCTION,   2-   9     7     6          Q >5    2  T-   0 S-   0  21-30     3      101-150    1
 ETC.)                  3-   3     3     2          S1-2    3  A-   1 C-   0  31-40     0      151-200    1
                        4-   0     3     2          S3-4    8  E-   0         41-50     0         >200    1
                                                    S >5    0  I-   1          > 50     2        TOTAL   984      TOTAL       0

INTRODUCTORY SYSTEMS    0-   4     1     3          Q1-2    0  L-   8 P-   0   1-10     3        1- 50   11       IN-DPT     10
 ANALYSIS (BUSINESS)    1-   7     8     8          Q3-4    3  R-   8 D-   0  11-20     7       51-100    4       OUT-DPT     5
                        2-   5     8     5          Q >5    2  T-   0 S-   1  21-30     8      101-150    1
                        3-   3     2     3          S1-2    0  A-   3 C-   0  31-40     2      151-200    1
                        4-   2     2     2          S3-4   14  E-   1         41-50     0         >200    4
                                                    S >5    0  I-   0          > 50     1        TOTAL  2087      TOTAL      15

LARGE SCALE INFORMATION 0-   1     0     0          Q1-2    0  L-   3 P-   0   1-10     3        1- 50    9       IN-DPT      1
 PROCESSING SYSTEMS     1-   6     6     6          Q3-4    2  R-   3 D-   0  11-20     2       51-100    1       OUT-DPT    13
                        2-   1     2     2          Q >5    0  T-   0 S-   1  21-30     1      101-150    0
                        3-   2     2     2          S1-2    0  A-   2 C-   0  31-40     1      151-200    0
                        4-   0     0     0          S3-4    7  E-   1         41-50     3         >200    0
                                                    S >5    0  I-   0          > 50     0        TOTAL   259      TOTAL      14

FILE ORGANIZATION       0-   4     3     1          Q1-2    0  L-   6 P-   0   1-10     6        1- 50   10       IN-DPT     35
                        1-   5     3     4          Q3-4    6  R-   5 D-   0  11-20     0       51-100    0       OUT-DPT     5
                        2-   2     3     4          Q >5    0  T-   0 S-   0  21-30     3      101-150    1
                        3-   1     3     3          S1-2    0  A-   0 C-   0  31-40     1      151-200    1
                        4-   0     0     0          S3-4    4  E-   1         41-50     1         >200    0
                                                    S >5    0  I-   0          > 50     1        TOTAL   429      TOTAL      40

DATA BASE MANAGEMENT    0-  10     3     5          Q1-2    1  L-  26 P-   0   1-10    12        1- 50   37       IN-DPT      3
                        1-  23    28    27          Q3-4    7  R-   8 D-   0  11-20    13       51-100    8       OUT-DPT    27
                        2-  10    12    11          Q >5    1  T-   2 S-   3  21-30    12      101-150    0
                        3-   2     2     2          S1-2    1  A-   3 C-   0  31-40     4      151-200    0
                        4-   0     0     0          S3-4   33  E-   3         41-50     4         >200    0
                                                    S >5    0  I-   0          > 50     0        TOTAL  1295      TOTAL      30

INFORMATION SYSTEMS     0-   1     0     2          Q1-2    1  L-  10 P-   0   1-10     2        1- 50   10       IN-DPT      0
 DESIGN (INTRODUCTORY)  1-   7     8     6          Q3-4    1  R-   4 D-   0  11-20     3       51-100    4       OUT-DPT    28
                        2-   8     8     8          Q >5    0  T-   0 S-   0  21-30     5      101-150    2
                        3-   0     0     0          S1-2    0  A-   2 C-   0  31-40     1      151-200    0
                        4-   0     0     0          S3-4   14  E-   0         41-50     5         >200    0
                                                    S >5    0  I-   0          > 50     0        TOTAL   830      TOTAL      28

INFORMATION SYSTEMS     0-   3     4     3          Q1-2    0  L-  13 P-   0   1-10     8        1- 50   20       IN-DPT      2
 DESIGN (ADVANCED)      1-  16    14    15          Q3-4    5  R-   3 D-   0  11-20     9       51-100    0       OUT-DPT     7
                        2-   1     2     2          Q >5    1  T-   0 S-   1  21-30     0      101-150    1
                        3-   0     0     0          S1-2    0  A-   1 C-   0  31-40     3      151-200    0
                        4-   1     1     1          S3-4   13  E-   2         41-50     1         >200    0
                                                    S >5    1  I-   1          > 50     0        TOTAL   421      TOTAL       9

MANAGEMENT INFORMATION  0-   3     3     3          Q1-2    0  L-  15 P-   0   1-10     4        1- 50   12       IN-DPT     34
 SYSTEMS                1-   7     9    10          Q3-4    5  R-   2 D-   0  11-20     3       51-100    5       OUT-DPT    18
                        2-   8     6     5          Q >5    1  T-   1 S-   0  21-30     5      101-150    1
                        3-   2     2     2          S1-2    1  A-   3 C-   0  31-40     6      151-200    0
                        4-   2     2     2          S3-4   12  E-   1         41-50     1         >200    4
                                                    S >5    1  I-   0          > 50     3        TOTAL  2344      TOTAL      52

MANAGEMENT OF COMPUTER  0-   1     0     0          Q1-2    1  L-   3 P-   0   1-10     1        1- 50    7       IN-DPT      0
 CENTERS OF INFORMATION 1-   5     5     5          Q3-4    2  R-   1 D-   0  11-20     7       51-100    2       OUT-DPT     1
  PROCESSING DEPARTMENTS 2-  1     2     2          Q >5    0  T-   2 S-   0  21-30     0      101-150    0
                        3-   1     1     1          S1-2    0  A-   3 C-   0  31-40     0      151-200    0
                        4-   1     1     1          S3-4    6  E-   0         41-50     1         >200    0
                                                    S >5    0  I-   0          > 50     0        TOTAL   345      TOTAL       1
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                                                   SUMMARY BY COURSE TYPE
     GROUP I                  ABOVE 20000)         CONTINUED
                            NUMBER  OF  TERMS           CR HOURS                             **  AVERAGE ** *ENROLLMENT* COST COMPUTER SVCS
 COURSE DESCRIPTION             OFFERED                 QTR AND                                    SECT     * 1976-77  * 1976-77 (THOUS$)
                            76-77 77-78 78-79           SEMESTER    MODE CF OPER        NO.        SIZE     * NO.  FREQ* ON AND OFF-CAMPUS

COMPUTERS AND ACCOUNTING 0-    2     3     4            Q1-2      0  L-    5 P-   0   1-10     2        1- 50     3      IN-DPT     80
 (INCLUDING AUDITING)    1-    2     1     0            Q3-4      1  R-    3 D-   0  11-20     0       51-100     3      OUT-DPT     0
                         2-    2     3     3            Q >5      1  T-    0 S-   1  21-30     6      101-150     1
                         3-    2     2     2            S1-2      1  A-    0 C-   0  31-40     0      151-200     1
                         4-    2     1     1            S3-4      6  E-    1         41-50     1         >200     2
                                                        S >5      0  I-    0          > 50     1        TOTAL  1128      TOTAL      80

ECONOMETRIC SIMULATION   0-    3     4     4            Q1-2      0  L-    6 P-   0   1-10     5        1- 50     7      IN-DPT      0
 APPLICATIONS            1-    3     3     1            Q3-4      4  R-    1 C-   0  11-20     1       51-100     0      OUT-DPT     0
                         2-    1     0     2            Q >5      2  T-    0 S-   0  21-30     1      101-150     0
                         3-    0     0     0            S1-2      0  A-    0 C-   0  31-40     0      151-200     0
                         4-    0     0     0            S3-4      1  E-    0         41-50     0         >200     0
                                                        S >5      0  I-    0          > 50     0        TOTAL    72      TOTAL       0

INSTRUCTIONAL DESIGN     0-    0     1     0            Q1-2      0  L-    1 P-   0   1-10     0        1- 50     1      IN-DPT      0
                         1-    1     0     1            Q3-4      0  R-    0 D-   0  11-20     1       51-100     0      OUT-DPT     0
                         2-    0     0     0            Q >5      0  T-    0 S-   0  21-30     0      101-150     0
                         3-    0     0     0            S1-2      0  A-    0 C-   0  31-40     0      151-200     0
                         4-    0     0     0            S3-4      1  E-    0         41-50     0         >200     0
                                                        S >5      0  I-    0          > 50     0        TOTAL    20      TOTAL       0

INSTRUCTIONAL SYSTEMS    0-    1     2     0            Q1-2      0  L-    1 P-   2   1-10     2        1- 50     4      IN-DPT      3
                         1-    2     1     3            Q3-4      0  R-    0 C-   0  11-20     1       51-100     0      OUT-DPT     0
                         2-    2     2     2            Q >5      0  T-    0 S-   0  21-30     1      101-150     1
                         3-    0     0     0            S1-2      0  A-    0 C-   1  31-40     0      151-200     0
                         4-    0     0     0            S3-4      5  E-    1         41-50     0         >200     0
                                                        S >5      0  I-    0          > 50     1        TOTAL   169      TOTAL       3

COMPUTER BASED           0-    0     0     0            Q1-2      0  L-    1 P-   1   1-10     1        1- 50     2      IN-DPT      1
INSTRUCTION              1-    1     1     1            Q3-4      0  R-    1 D-   0  11-20     0       51-100     2      OUT-DPT     0
                         2-    3     3     3            Q >5      0  T-    0 S-   0  21-30     1      101-150     0
                         3-    0     0     0            S1-2      1  A-    0 C-   1  31-40     1      151-200     0
                         4-    0     0     0            S3-4      3  E-    0         41-50     1         >200     0
                                                        S >5      0  I-    0          > 50     0        TOTAL   208      TOTAL       1

OTHER                    0-   64    52    75            Q1-2     16  L-  153 P-   7   1-10   165        1- 50   282      IN-DPT     68
                         1-  136   145   133            Q3-4     79  R-   35 D-  26  11-20    89       51-100    24      OUT-DPT   338
                         2-   52    57    50            Q >5     14  T-    0 S-  51  21-30    33      101-150     9
                         3-   51    48    44            S1-2     50  A-    3 C-   0  31-40    21      151-200     2
                         4-   26    27    27            S3-4    153  E-    1         41-50     9         >200    12
                                                        S >5     12  I-   53          > 50    12        TOTAL 13222      TOTAL     406

DESCRIPTION NOT CODED    0-   35    38    54            Q1-2     20  L-  116 P-   1   1-10   101        1- 50   142      IN-DPT      0
                         1-  100    96    84            Q3-4     72  R-   45 D-   2  11-20    25       51-100    18      OUT-DPT     0
                         2-   30    31    28            Q >5      4  T-    0 S-   8  21-30    10      101-150     8
                         3-    3     3     2            S1-2     11  A-    1 C-   0  31-40     9      151-200     2
                         4-   16    16    16            S3-4     77  E-    0         41-50    34         >200    14
                                                        S >5      0  I-   11          > 50     5        TOTAL 10261      TOTAL       0
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XI. SUMMARIES FROM FORM 4
INSTITUTIONAL ADMINISTRATIVE APPLICATIONS

The following variables and levels were used for summarizing the responses:

Type of Control	Highest Degree Offered	Fall 1975 Enrollment Class
1. Public	1. Associate	1. Less than 500
2. Private	2. Bachelor's	2. 500 - 2,499
	3. Master's	3. 2,500 - 9,999
	4. Doctorate	4. 10,000 - 19,999
		5. 20,000 and above

Summaries for the elementary (three-way) groups, the individual levels (one-way) of the control variables, and the total population are presented provided that there were enough institutions included and/or reporting in the category to preclude identification of the institutions involved (i.e. at least two institutions must have reported in a group for the summary of that group to be included).

Each group summary is identified by the levels of three control variables. For example, group (Public, Associate, Below 500) identifies the summary for all public institutions offering at most the associate degree and having had an enrollment of less than 500 students during fall 1975. Since all summaries for FORM 4 are identical in format, only one will be discussed here as a guide. The total group is chosen for this purpose, i.e. group (, ,).

The summaries are straightforward tallies of the responses for each administrative function listed on FORM 4. Many schools did not respond to FORM 4 because they did not note that it was applicable even though they did not have a computer. The summaries for manual, bookkeeping machines and ledger accounting machines are not meaningful because of this. However, the data relative to computer usage are quite complete.

GROUP (   )

TOTAL NUMBER OF INSTITUTIONS = 3136

TOTAL NUMBER OF INSTITUTIONS REPORTING = 1822

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
********** PLANNING, MANAGEMENT & INSTITUTIONAL RESEARCH						
BUDGET FORECASTING	626	5	8	3	245	42
BUDGET ANALYSIS	446	11	16	4	433	60
INSTITUTIONAL COST STUDIES	435	9	11		430	39
SUPPORT STAFF SALARY ANALYSIS	453	4	6	1	388	51
SUPPORT STAFF ACTIVITY ANAL.	478		3		137	24
STUDENT FLOW MODELING	370			1	196	22
ENROLLMENT FORECASTING	595	1		4	225	31
DATA ELEMENT DICTIONARY	282	1			214	57
********** FINANCIAL MANAGEMENT APPLICATIONS						
GENERAL FUND LEDGER	163	69	95	5	612	88
DEPARTMENTAL EXPENDITURES	121	60	71	6	675	95
STUDENTS ACCTS. RECEIVABLE	233	66	65	7	536	92
PAYROLL	72	32	28	4	775	104
RETIREMENT SYSTEM ACCOUNTING	247	25	30	3	525	50
CASH FLOW PROJECTION	617	14	26	1	147	16
INVESTMENT EVALUATION	591	10	12	1	92	7
RESEARCH PROJECT ACCOUNTING	331	30	27	1	248	37
FINANCIAL AID ACCOUNTING	276	33	39	6	546	85
RESIDENCE HALL ACCOUNTING	206	38	38	7	349	60
TELEPHONE ACCOUNTING	476	24	38	4	300	32
********** GENERAL ADMINISTRATIVE SERVICE APPLICATIONS						
FACILITIES INVENTORY (SPACE)	442	2	1	6	443	44
CLASSROOM UTILIZATION ANAL.	441	1	1	1	417	37
PERSONNEL EVALUATION	786		1	1	98	10
HEW COMPLIANCE REPORTING	551		5	3	350	17
CIVIL SERVICE POSITION RECORDS	368				101	15
********** AUXILIARY SERVICE APPLICATIONS						
FACULTY/STAFF DIRECTORY	490	1	1	1	396	54
RESIDENCE HALL ASSIGNMENT	461		1	2	153	45
STUDENT HOUSING REPORTS	314	2	3	1	298	38
BOOKSTORE INVENTORY & OPERATNS	612	12	10	3	164	23
********** LOGISTICS AND RELATED SERVICES						
PURCHASE ORDER FOLLOW-UP	714	3	5	1	138	35
VENDOR INFORMATION SYSTEM	491	4	4	2	271	70
OFFICE MACHINE REPAIR CONTROL	700	2	3	1	41	3
AUTOMOBILE REGISTRATION	612		2	3	164	27
TRAFFIC VIOLATION RECORDS	590	1	5	3	91	24
CAR POOL MATCHING	324	1		1	73	3
********** PHYSICAL PLANT OPERATIONS						
PHYSICAL PLANT ACCOUNTING	490	25	35	4	295	36
BUILDING MAINTENANCE COSTS	608	19	21	2	198	19
KEY INVENTORY	750	1	4	3	88	8
********** ADMISSIONS AND RECORDS APPLICATIONS						
UNDERGRAD. ADMISSIONS PROCESS.	265	2	1	5	541	198
HIGH SCHOOL TESTING RECORDS	332			3	385	98
SCHEDULE OF CLASSES PREPARATN.	353			5	517	135
TUITION & FEE ASSESSMENT	330	7	11	3	503	133
CLASS ROSTERS	85			5	856	113
COURSE ADD/DROP PROCESSING	154			10	668	210
ENROLLMENT STATISTICS	139	1		3	822	94
TERM GRADE REPORTING	89			7	863	99
STUDENT TRANSCRIPT RECORDS	352	3	1	4	554	88
CORRESPONDENCE COURSE RECORDS	289			2	102	20
********** FINANCIAL AID ADMINISTRATION						
FINANCIAL AID EVALUATION	666	5	3	4	217	51
STUDENT EMPLOYMENT RECORDS	511	7	7	2	373	47
********** LIBRARY APPLICATIONS						
ACQUISITIONS	687	4	2	2	155	55
CARD & MATERIAL PREP. & CONTRL	647		1	4	114	108
SERIALS HOLDINGS	610	1	1	7	208	44
FUGITIVE MATERIAL INDEXING	636	1			27	16
********** OTHER ADMINISTRATIVE APPLICATIONS						
ALUMNI RECORDS	279	3	1	5	541	93
TEST SCORING & ANALYSIS	382	2	1	14	420	31
TEACHER EVALUATION	480			4	367	16
FRATERNITY/SORORITY RUSH RECDS	315	1		3	38	5
STUDENT PSYCHOLOGICAL TESTING	560			4	73	3
********** HOSPITAL APPLICATIONS						
PATIENT REGISTRATION/ADMISSION	81	1			25	32
MEDICAL RECORDS	97	1			27	13
CENTRAL SUPPLY INVENTORY	97	1	1		21	7
DIETARY/FOOD SERVICE	96				9	5
LABORATORY INFORMATION SYSTEM	74		1		5	25
PHARMACY INFORMATION SYSTEM	81		2		8	16
PHYSICIAN SUPPORT SYSTEM	92		1		6	7
HOSPITAL FINANCIAL INFO. SYSTM	51	1	2	1	50	4

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
**********						
BUDGET PREPARATION	478	8	17	4	413	80
BUDGET POSITION CONTROL	363	16	27	3	402	82
FACULTY SALARY ANALYSIS	422	5	5	1	453	51
FACULTY ACTIVITY ANALYSIS	382	2	2		365	43
RESOURCE REQUIREMENTS MODELING	387		1		156	20
LONG RANGE PLANNING	655		2	1	124	19
HEGIS REPORTING	344	3	3	3	521	38
INSTITUTIONAL CODING STRUCTURE	306	1	2	4	277	51
**********						
GENERAL FUND EXPENDITURES	120	65	82	5	658	97
GENERAL ACCTS. RECEIVABLE	248	77	83	9	497	67
ACCOUNTS PAYABLE	214	67	70	8	547	86
EMPLOYEE BENEFIT ACCOUNTING	244	33	38	4	566	60
BANK ACCOUNT RECONCILIATION	497	25	26	9	349	27
INVESTMENT RECORDS	537	19	30	5	152	20
GRANT & CONTRACT ADMINISTRAT.	499	25	30	2	257	32
RESEARCH PROPOSAL MONITORING	493	11	12		77	13
TUITION & FEE ACCOUNTING	192	47	50	5	598	106
STORES ACCOUNTING	418	29	50	4	287	41
**********						
FACILITIES UTILIZATION ANAL.	462	2	1	2	384	26
PERSONNEL RECORDS	482	1	3	2	384	102
PERSONNEL PLACEMENT	782		2		41	12
STAFF ETHNIC GROUP REPORTING	525	1	2	1	332	25
**********						
FACULTY CLUB BILLING	216	3	1		51	3
STUDENT DIRECTORY PREPARATION	214			5	538	60
FOOD SERVICE MENU & INVENTORY	548	3	2	2	38	11
**********						
PURCHASING INFORMATION SYSTEM	609	3	6	1	164	47
STORES INVENTORY	624	3	5	3	171	19
EQUIPMENT INVENTORY	429	3	2	2	430	39
PARKING LOT SPACE ASSIGNMENT	530		1	1	43	5
CRIME REPORTING	580		3		19	6
MOTOR POOL RECORDS	503	1	1		56	2
**********						
PHYSICAL PLANT JOB SCHEDULING	774	1	1	2	55	7
EQUIPMENT PREVENTATIVE MAINTEN	732		3	1	60	4
**********						
GRADUATE ADMISSIONS PROCESSING	186			1	256	101
COURSE CATALOG RECORDS	325	1	1	7	490	168
STUDENT CLASS SCHEDULING	407			3	415	133
STUDENT REGISTRATION PROCESS.	147			6	704	192
TERM STUDENT RECORDS & REPORTS	96	1		5	838	104
ENROLLMENT REPORTING	134	1		5	820	92
STUDENT ETHNIC GROUP REPORTING	216		1	2	696	73
HONORS PROGRAM RECORDS	258		2	3	543	47
DEGREE REQUIREMENTS EVAL.	728		1	2	164	31
**********						
FINANCIAL AWARDS	567	5	4	1	314	68
WORK STUDY RECORDS	477	10	6	2	420	47
**********						
CATALOGING	606	1	1	1	118	169
CIRCULATION CONTROL	736	2		2	109	41
BIBLIOGRAPHICAL SEARCH SERVICE	584		1		76	135
EDUCATIONAL MEDIA SERVICES	688			3	87	35
**********						
FOUNDATION & GIFT RECORDS	463	6	10	4	292	71
CURRICULUM PLANNING	739	1		2	50	5
TEACHER PLACEMENT	655		1	1	25	12
STUDENT COUNSELING RECORDS	690			1	64	9
ATHELETIC EVENT TICKET SYSTEM	502		1	2	63	12
**********						
HOSPITAL CENSUS	67	1			29	20
APPOINTMENTS & SCHEDULING	107	1			4	14
COMMUNICATIONS & ORDER ENTRY	95	1			6	8
HOUSEKEEPING	114				2	1
RADIOLOGY INFORMATION SYSTEM	75		1		10	12
NURSING STATION SUPPORT SYSTEM	83		1		7	8
PATIENT BILLING/ACCTS. REC.	44	1	1		55	13

INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
WITH SUPPORT FROM THE NATIONAL SCIENCE FOUNDATION

GROUP (PUBLIC:)

TOTAL NUMBER OF INSTITUTIONS = 1509 TOTAL NUMBER OF INSTITUTIONS REPORTING = 877

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
*********** PLANNING, MANAGEMENT & INSTITUTIONAL RESEARCH						
BUDGET FORECASTING	363	2	4	1	166	22
BUDGET ANALYSIS	236	4	9	1	297	39
INSTITUTIONAL COST STUDIES	208	5	5		321	26
SUPPORT STAFF SALARY ANALYSIS	227	2	1	1	289	36
SUPPORT STAFF ACTIVITY ANAL.	247				110	16
STUDENT FLOW MODELING	204			1	147	12
ENROLLMENT FORECASTING	331			4	173	19
DATA ELEMENT DICTIONARY	160	1			178	41
*********** FINANCIAL MANAGEMENT APPLICATIONS						
GENERAL FUND LEDGER	101	25	37		393	61
DEPARTMENTAL EXPENDITURES	68	22	22	1	438	66
STUDENTS ACCTS. RECEIVABLE	158	17	29	1	320	59
PAYROLL	41	11	10		473	69
RETIREMENT SYSTEM ACCOUNTING	97	10	9		383	38
CASH FLOW PROJECTION	333	7	11	1	110	5
INVESTMENT EVALUATION	319	3	5	1	49	5
RESEARCH PROJECT ACCOUNTING	188	13	8		163	25
FINANCIAL AID ACCOUNTING	157	10	13	2	353	60
RESIDENCE HALL ACCOUNTING	105	10	13	3	187	31
TELEPHONE ACCOUNTING	268	9	14	1	210	17
*********** GENERAL ADMINISTRATIVE SERVICE APPLICATIONS						
FACILITIES INVENTORY (SPACE)	176	1		3	369	33
CLASSROOM UTILIZATION ANAL.	191	1		1	349	22
PERSONNEL EVALUATION	458		1	1	76	8
HEW COMPLIANCE REPORTING	272		2	1	278	9
CIVIL SERVICE POSITION RECORDS	212				97	14
*********** AUXILIARY SERVICE APPLICATIONS						
FACULTY/STAFF DIRECTORY	271	1	1		257	29
RESIDENCE HALL ASSIGNMENT	213			1	84	21
STUDENT HOUSING REPORTS	132	2	3		174	13
BOOKSTORE INVENTORY & OPERATNS	346	7	6	2	124	16
*********** LOGISTICS AND RELATED SERVICES						
PURCHASE ORDER FOLLOW-UP	408	2	3		107	26
VENDOR INFORMATION SYSTEM	282	3	3	1	178	53
OFFICE MACHINE REPAIR CONTROL	406	2	2	1	34	2
AUTOMOBILE REGISTRATION	328		2	3	124	20
TRAFFIC VIOLATION RECORDS	332		3	3	77	19
CAR POOL MATCHING	184	1		1	64	2
*********** PHYSICAL PLANT OPERATIONS						
PHYSICAL PLANT ACCOUNTING	290	8	14	2	189	23
BUILDING MAINTENANCE COSTS	363	8	8	1	127	10
KEY INVENTORY	433	1	3	1	70	8
*********** ADMISSIONS AND RECORDS APPLICATIONS						
UNDERGRAD. ADMISSIONS PROCESS.	117	1	1	2	360	132
HIGH SCHOOL TESTING RECORDS	168			2	251	52
SCHEDULE OF CLASSES PREPARATN.	155			3	357	96
TUITION & FEE ASSESSMENT	190	2	4	1	305	96
CLASS ROSTERS	18			3	550	67
COURSE ADD/DROP PROCESSING	49			2	440	142
ENROLLMENT STATISTICS	36	1		1	553	51
TERM GRADE REPORTING	20			4	562	50
STUDENT TRANSCRIPT RECORDS	178	2	1	3	365	58
CORRESPONDENCE COURSE RECORDS	176			1	73	17
*********** FINANCIAL AID ADMINISTRATION						
FINANCIAL AID EVALUATION	389	2	3	2	138	31
STUDENT EMPLOYMENT RECORDS	303	3	5		233	21
*********** LIBRARY APPLICATIONS						
ACQUISITIONS	388	2	2	1	125	31
CARD & MATERIAL PREP. & CONTRL	389		1	4	86	44
SERIALS HOLDINGS	338	1	1	4	156	27
FUGITIVE MATERIAL INDEXING	383	1			25	9
*********** OTHER ADMINISTRATIVE APPLICATIONS						
ALUMNI RECORDS	163	1	1	2	308	37
TEST SCORING & ANALYSIS	169	2		11	324	19
TEACHER EVALUATION	267			3	254	9
FRATERNITY/SORORITY RUSH RECDS	177			3	33	2
STUDENT PSYCHOLOGICAL TESTING	323			4	53	1
*********** HOSPITAL APPLICATIONS						
PATIENT REGISTRATION/ADMISSION	42	1			14	27
MEDICAL RECORDS	56	1			15	12
CENTRAL SUPPLY INVENTORY	56	1			15	6
DIETARY/FOOD SERVICE	56				7	4
LABORATORY INFORMATION SYSTEM	44				3	19
PHARMACY INFORMATION SYSTEM	49		1		7	13
PHYSICIAN SUPPORT SYSTEM	52				5	6
HOSPITAL FINANCIAL INFO. SYSTM	32	1		1	33	4

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
***********						
BUDGET PREPARATION	265	3	6	1	279	54
BUDGET POSITION CONTROL	191	6	11		275	60
FACULTY SALARY ANALYSIS	197	3	1	1	334	37
FACULTY ACTIVITY ANALYSIS	183		1		284	29
RESOURCE REQUIREMENTS MODELING	206				125	13
LONG RANGE PLANNING	384			1	82	8
HEGIS REPORTING	139		2	2	399	24
INSTITUTIONAL CODING STRUCTURE	163	1		4	227	35
***********						
GENERAL FUND EXPENDITURES	66	26	27		431	69
GENERAL ACCTS. RECEIVABLE	165	29	32	3	314	44
ACCOUNTS PAYABLE	126	25	25	3	354	58
EMPLOYEE BENEFIT ACCOUNTING	107	10	11		393	44
BANK ACCOUNT RECONCILIATION	265	9	10	5	247	15
INVESTMENT RECORDS	296	3	13	3	86	9
GRANT & CONTRACT ADMINISTRAT.	286	10	10		182	22
RESEARCH PROPOSAL MONITORING	286	2	3		58	10
TUITION & FEE ACCOUNTING	110	10	21		384	71
STORES ACCOUNTING	210	15	24	1	208	30
***********						
FACILITIES UTILIZATION ANAL.	198	1		2	333	19
PERSONNEL RECORDS	230	1	2	2	277	81
PERSONNEL PLACEMENT	456		1		32	12
STAFF ETHNIC GROUP REPORTING	265	1	2	1	261	16
***********						
FACULTY CLUB BILLING	126	2			21	1
STUDENT DIRECTORY PREPARATION	90			2	335	24
FOOD SERVICE MENU & INVENTORY	279	2	1	1	29	8
***********						
PURCHASING INFORMATION SYSTEM	343	3	4		124	37
STORES INVENTORY	340	2	4	1	147	18
EQUIPMENT INVENTORY	159	2	1	2	374	30
PARKING LOT SPACE ASSIGNMENT	294		1	1	35	4
CRIME REPORTING	340		3		16	5
MOTOR POOL RECORDS	312		1		51	2
***********						
PHYSICAL PLANT JOB SCHEDULING	449	1	1	2	44	6
EQUIPMENT PREVENTATIVE MAINTEN	426		3	1	48	3
***********						
GRADUATE ADMISSIONS PROCESSING	73				189	66
COURSE CATALOG RECORDS	133	1		5	346	105
STUDENT CLASS SCHEDULING	203			1	279	93
STUDENT REGISTRATION PROCESS.	54			3	453	126
TERM STUDENT RECORDS & REPORTS	20	1		2	545	60
ENROLLMENT REPORTING	32	1		2	553	47
STUDENT ETHNIC GROUP REPORTING	69		1	1	497	37
HONORS PROGRAM RECORDS	102		2	2	390	34
DEGREE REQUIREMENTS EVAL.	430		1	2	107	18
***********						
FINANCIAL AWARDS	322	2	4		207	43
WORK STUDY RECORDS	273	6	4		274	26
***********						
CATALOGING	364	1	1	1	94	83
CIRCULATION CONTROL	420			2	87	33
BIBLIOGRAPHICAL SEARCH SERVICE	341		1		57	77
EDUCATIONAL MEDIA SERVICES	403			2	75	24
***********						
FOUNDATION & GIFT RECORDS	304	2	7	2	124	24
CURRICULUM PLANNING	434			2	39	4
TEACHER PLACEMENT	382		1	1	23	11
STUDENT COUNSELING RECORDS	407			1	47	8
ATHELETIC EVENT TICKET SYSTEM	296			2	48	9
***********						
HOSPITAL CENSUS	38	1			16	19
APPOINTMENTS & SCHEDULING	62	1			3	11
COMMUNICATIONS & ORDER ENTRY	54	1			6	6
HOUSEKEEPING	71				1	
RADIOLOGY INFORMATION SYSTEM	46				8	10
NURSING STATION SUPPORT SYSTEM	54				5	7
PATIENT BILLING/ACCTS. REC.	25	1			35	10

GROUP (PRIVATE:)

TOTAL NUMBER OF INSTITUTIONS = 1627

TOTAL NUMBER OF INSTITUTIONS REPORTING = 945

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
********** PLANNING, MANAGEMENT & INSTITUTIONAL RESEARCH						
BUDGET FORECASTING	263	3	4	2	79	20
BUDGET ANALYSIS	210	7	7	3	136	21
INSTITUTIONAL COST STUDIES	227	4	6		109	13
SUPPORT STAFF SALARY ANALYSIS	226	2	5		99	15
SUPPORT STAFF ACTIVITY ANAL.	231		3		27	8
STUDENT FLOW MODELING	166				49	10
ENROLLMENT FORECASTING	264	1			52	12
DATA ELEMENT DICTIONARY	122				36	16
********** FINANCIAL MANAGEMENT APPLICATIONS						
GENERAL FUND LEDGER	62	44	58	5	219	27
DEPARTMENTAL EXPENDITURES	53	38	49	5	237	29
STUDENTS ACCTS. RECEIVABLE	75	49	36	6	216	33
PAYROLL	31	21	18	4	302	35
RETIREMENT SYSTEM ACCOUNTING	150	15	21	3	142	12
CASH FLOW PROJECTION	284	7	15		37	11
INVESTMENT EVALUATION	272	7	7		43	2
RESEARCH PROJECT ACCOUNTING	143	17	19	1	85	12
FINANCIAL AID ACCOUNTING	119	23	26	4	193	25
RESIDENCE HALL ACCOUNTING	101	28	25	4	162	29
TELEPHONE ACCOUNTING	208	15	24	3	90	15
********** GENERAL ADMINISTRATIVE SERVICE APPLICATIONS						
FACILITIES INVENTORY (SPACE)	266	1	1	3	74	11
CLASSROOM UTILIZATION ANAL.	250		1		68	15
PERSONNEL EVALUATION	328				22	2
HEW COMPLIANCE REPORTING	279		3	2	72	8
CIVIL SERVICE POSITION RECORDS	156				4	1
********** AUXILIARY SERVICE APPLICATIONS						
FACULTY/STAFF DIRECTORY	219			1	139	25
RESIDENCE HALL ASSIGNMENT	248		1	1	69	24
STUDENT HOUSING REPORTS	182			1	124	25
BOOKSTORE INVENTORY & OPERATNS	266	5	4	1	40	7
********** LOGISTICS AND RELATED SERVICES						
PURCHASE ORDER FOLLOW-UP	306	1	2	1	31	9
VENDOR INFORMATION SYSTEM	209	1	1	1	93	17
OFFICE MACHINE REPAIR CONTROL	294		1		7	1
AUTOMOBILE REGISTRATION	284				40	7
TRAFFIC VIOLATION RECORDS	258	1	2		14	5
CAR POOL MATCHING	140				9	1
********** PHYSICAL PLANT OPERATIONS						
PHYSICAL PLANT ACCOUNTING	200	17	21	2	106	13
BUILDING MAINTENANCE COSTS	245	11	13	1	71	9
KEY INVENTORY	317		1	2	18	
********** ADMISSIONS AND RECORDS APPLICATIONS						
UNDERGRAD. ADMISSIONS PROCESS.	148	1		3	181	66
HIGH SCHOOL TESTING RECORDS	164			1	134	46
SCHEDULE OF CLASSES PREPARATN.	198			2	160	39
TUITION & FEE ASSESSMENT	140	5	7	2	198	37
CLASS ROSTERS	67			2	306	46
COURSE ADD/DROP PROCESSING	105			8	228	68
ENROLLMENT STATISTICS	103			2	269	43
TERM GRADE REPORTING	69			3	301	49
STUDENT TRANSCRIPT RECORDS	174	1		1	189	30
CORRESPONDENCE COURSE RECORDS	113			1	29	3
********** FINANCIAL AID ADMINISTRATION						
FINANCIAL AID EVALUATION	277	3		2	79	20
STUDENT EMPLOYMENT RECORDS	208	4	2	2	140	26
********** LIBRARY APPLICATIONS						
ACQUISITIONS	299	2		1	30	24
CARD & MATERIAL PREP. & CONTRL	258				28	64
SERIALS HOLDINGS	272			3	52	17
FUGITIVE MATERIAL INDEXING	253				2	7
********** OTHER ADMINISTRATIVE APPLICATIONS						
ALUMNI RECORDS	116	2		3	233	56
TEST SCORING & ANALYSIS	213		1	3	96	12
TEACHER EVALUATION	213			1	113	7
FRATERNITY/SORORITY RUSH RECDS	138	1			5	3
STUDENT PSYCHOLOGICAL TESTING	237				20	2
********** HOSPITAL APPLICATIONS						
PATIENT REGISTRATION/ADMISSION	39				11	5
MEDICAL RECORDS	41				12	1
CENTRAL SUPPLY INVENTORY	41		1		6	1
DIETARY/FOOD SERVICE	40				2	1
LABORATORY INFORMATION SYSTEM	30		1		2	6
PHARMACY INFORMATION SYSTEM	32		1		1	3
PHYSICIAN SUPPORT SYSTEM	30		1		1	1
HOSPITAL FINANCIAL INFO. SYSTM	19		2		17	

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
**********						
BUDGET PREPARATION	213	5	11	3	134	26
BUDGET POSITION CONTROL	172	10	16	3	127	22
FACULTY SALARY ANALYSIS	225	2	4		119	14
FACULTY ACTIVITY ANALYSIS	199	2	1		81	14
RESOURCE REQUIREMENTS MODELING	181		1		31	7
LONG RANGE PLANNING	271		2		42	11
HEGIS REPORTING	205	3	1	1	122	14
INSTITUTIONAL CODING STRUCTURE	143		2		50	16
**********						
GENERAL FUND EXPENDITURES	54	39	55	5	227	28
GENERAL ACCTS. RECEIVABLE	83	48	51	6	183	23
ACCOUNTS PAYABLE	88	42	45	5	193	28
EMPLOYEE BENEFIT ACCOUNTING	137	23	27	4	173	16
BANK ACCOUNT RECONCILIATION	232	16	16	4	102	12
INVESTMENT RECORDS	241	16	17	2	66	11
GRANT & CONTRACT ADMINISTRAT.	213	15	20	2	75	10
RESEARCH PROPOSAL MONITORING	207	9	9		19	3
TUITION & FEE ACCOUNTING	82	37	29	5	214	35
STORES ACCOUNTING	200	14	26	3	79	11
**********						
FACILITIES UTILIZATION ANAL.	264	1	1		51	7
PERSONNEL RECORDS	252		1		107	21
PERSONNEL PLACEMENT	326		1		9	
STAFF ETHNIC GROUP REPORTING	260				71	9
**********						
FACULTY CLUB BILLING	90	1	1		30	2
STUDENT DIRECTORY PREPARATION	124			3	203	36
FOOD SERVICE MENU & INVENTORY	269	1	1	1	9	3
**********						
PURCHASING INFORMATION SYSTEM	266		2	1	40	10
STORES INVENTORY	284	1	1	2	24	1
EQUIPMENT INVENTORY	270	1	1		56	9
PARKING LOT SPACE ASSIGNMENT	236				8	1
CRIME REPORTING	240				3	1
MOTOR POOL RECORDS	191	1			5	
**********						
PHYSICAL PLANT JOB SCHEDULING	325				11	1
EQUIPMENT PREVENTATIVE MAINTEN	306				12	1
**********						
GRADUATE ADMISSIONS PROCESSING	113			1	67	35
COURSE CATALOG RECORDS	192		1	2	144	43
STUDENT CLASS SCHEDULING	204			2	136	40
STUDENT REGISTRATION PROCESS.	93		-	3	251	66
TERM STUDENT RECORDS & REPORTS	76			3	293	44
ENROLLMENT REPORTING	102			3	267	45
STUDENT ETHNIC GROUP REPORTING	147			1	199	36
HONORS PROGRAM RECORDS	156			1	153	13
DEGREE REQUIREMENTS EVAL.	298				57	13
**********						
FINANCIAL AWARDS	245	3		1	107	25
WORK STUDY RECORDS	204	4	2	2	146	21
**********						
CATALOGING	242				24	86
CIRCULATION CONTROL	316	2			22	8
BIBLIOGRAPHICAL SEARCH SERVICE	243				19	58
EDUCATIONAL MEDIA SERVICES	285			1	12	11
**********						
FOUNDATION & GIFT RECORDS	159	4	3	2	168	47
CURRICULUM PLANNING	305	1			11	1
TEACHER PLACEMENT	273				2	1
STUDENT COUNSELING RECORDS	283				17	1
ATHELETIC EVENT TICKET SYSTEM	206		1		15	3
**********						
HOSPITAL CENSUS	29				13	1
APPOINTMENTS & SCHEDULING	45				1	3
COMMUNICATIONS & ORDER ENTRY	41					2
HOUSEKEEPING	43				1	1
RADIOLOGY INFORMATION SYSTEM	29		1		2	2
NURSING STATION SUPPORT SYSTEM	29		1		2	1
PATIENT BILLING/ACCTS. REC.	19		1		20	3

INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
WITH SUPPORT FROM THE NATIONAL SCIENCE FOUNDATION

GROUP I ASSOCIATE: 1

TOTAL NUMBER OF INSTITUTIONS = 1196

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
********** PLANNING, MANAGEMENT & INSTITUTIONAL RESEARCH						
BUDGET FORECASTING	201	2	4		67	8
BUDGET ANALYSIS	135	6	7	1	135	18
INSTITUTIONAL COST STUDIES	121	5	4		149	7
SUPPORT STAFF SALARY ANALYSIS	143	2	2		115	13
SUPPORT STAFF ACTIVITY ANAL.	139				41	6
STUDENT FLOW MODELING	116			1	46	4
ENROLLMENT FORECASTING	181			2	64	10
DATA ELEMENT DICTIONARY	83				70	19
********** FINANCIAL MANAGEMENT APPLICATIONS						
GENERAL FUND LEDGER	73	14	25		175	37
DEPARTMENTAL EXPENDITURES	52	14	18		202	37
STUDENTS ACCTS. RECEIVABLE	115	13	20		130	26
PAYROLL	30	13	8		239	29
RETIREMENT SYSTEM ACCOUNTING	74	10	7		172	17
CASH FLOW PROJECTION	185	5	10		48	4
INVESTMENT EVALUATION	164	4	5		21	2
RESEARCH PROJECT ACCOUNTING	108	7	3		39	4
FINANCIAL AID ACCOUNTING	111	8	10		142	32
RESIDENCE HALL ACCOUNTING	62	4	7		27	7
TELEPHONE ACCOUNTING	175	7	11		46	5
********** GENERAL ADMINISTRATIVE SERVICE APPLICATIONS						
FACILITIES INVENTORY (SPACE)	133			3	142	10
CLASSROOM UTILIZATION ANAL.	126			1	152	7
PERSONNEL EVALUATION	244		1		28	3
HEW COMPLIANCE REPORTING	188			1	93	3
CIVIL SERVICE POSITION RECORDS	113				28	2
********** AUXILIARY SERVICE APPLICATIONS						
FACULTY/STAFF DIRECTORY	183	1	1		86	7
RESIDENCE HALL ASSIGNMENT	81				6	
STUDENT HOUSING REPORTS	74				15	
BOOKSTORE INVENTORY & OPERATNS	198	2	3		47	7
********** LOGISTICS AND RELATED SERVICES						
PURCHASE ORDER FOLLOW-UP	212	1	3		51	13
VENDOR INFORMATION SYSTEM	137	2	2		95	30
OFFICE MACHINE REPAIR CONTROL	205	1	1		11	1
AUTOMOBILE REGISTRATION	183		1	2	34	7
TRAFFIC VIOLATION RECORDS	164		2		18	5
CAR POOL MATCHING	92				21	1
********** PHYSICAL PLANT OPERATIONS						
PHYSICAL PLANT ACCOUNTING	164	6	4		67	13
BUILDING MAINTENANCE COSTS	179	6	5		57	8
KEY INVENTORY	223			1	29	6
********** ADMISSIONS AND RECORDS APPLICATIONS						
UNDERGRAD. ADMISSIONS PROCESS.	92	1		2	162	67
HIGH SCHOOL TESTING RECORDS	122			1	74	22
SCHEDULE OF CLASSES PREPARATN.	98			2	166	49
TUITION & FEE ASSESSMENT	137	2	1		106	59
CLASS ROSTERS	14			3	278	41
COURSE ADD/DROP PROCESSING	40			1	212	80
ENROLLMENT STATISTICS	31	1		1	272	35
TERM GRADE REPORTING	16			3	288	29
STUDENT TRANSCRIPT RECORDS	74		1	3	203	39
CORRESPONDENCE COURSE RECORDS	81				27	5
********** FINANCIAL AID ADMINISTRATION						
FINANCIAL AID EVALUATION	226	2	2	1	43	13
STUDENT EMPLOYMENT RECORDS	191	2	1		84	5
********** LIBRARY APPLICATIONS						
ACQUISITIONS	231		1	1	35	15
CARD & MATERIAL PREP. & CONTRL	235		1	1	26	4
SERIALS HOLDINGS	221		1	1	24	9
FUGITIVE MATERIAL INDEXING	191				9	3
********** OTHER ADMINISTRATIVE APPLICATIONS						
ALUMNI RECORDS	115		1	4	93	7
TEST SCORING & ANALYSIS	111	1		5	130	10
TEACHER EVALUATION	159			1	104	5
FRATERNITY/SORORITY RUSH RECDS	43			1	1	1
STUDENT PSYCHOLOGICAL TESTING	141			2	23	1
********** HOSPITAL APPLICATIONS						
PATIENT REGISTRATION/ADMISSION	14				2	2
MEDICAL RECORDS	16					
CENTRAL SUPPLY INVENTORY	12					
DIETARY/FOOD SERVICE	11					
LABORATORY INFORMATION SYSTEM	10					1
PHARMACY INFORMATION SYSTEM	9					1
PHYSICIAN SUPPORT SYSTEM	8					
HOSPITAL FINANCIAL INFO. SYSTM	8					1

TOTAL NUMBER OF INSTITUTIONS REPORTING = 655

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
**********						
BUDGET PREPARATION	158	2	5	1	127	20
BUDGET POSITION CONTROL	105	6	9		128	21
FACULTY SALARY ANALYSIS	133	3	2		129	13
FACULTY ACTIVITY ANALYSIS	121		1		108	13
RESOURCE REQUIREMENTS MODELING	113				48	4
LONG RANGE PLANNING	198		1	1	33	3
HEGIS REPORTING	97	1	1	1	171	15
INSTITUTIONAL CODING STRUCTURE	99			2	86	17
**********						
GENERAL FUND EXPENDITURES	52	15	23		196	41
GENERAL ACCTS. RECEIVABLE	110	17	21	1	131	27
ACCOUNTS PAYABLE	79	17	19		159	35
EMPLOYEE BENEFIT ACCOUNTING	83	9	9		173	20
BANK ACCOUNT RECONCILIATION	171	7	8		98	7
INVESTMENT RECORDS	165	3	7	1	33	5
GRANT & CONTRACT ADMINISTRAT.	174	8	5		55	4
RESEARCH PROPOSAL MONITORING	123	3	4		7	4
TUITION & FEE ACCOUNTING	87	11	15		150	42
STORES ACCOUNTING	126	6	15		72	13
**********						
FACILITIES UTILIZATION ANAL.	136			2	130	5
PERSONNEL RECORDS	167	1	2	1	101	26
PERSONNEL PLACEMENT	234		1		9	8
STAFF ETHNIC GROUP REPORTING	174		1	1	83	5
**********						
FACULTY CLUB BILLING	58				2	
STUDENT DIRECTORY PREPARATION	71			1	108	6
FOOD SERVICE MENU & INVENTORY	116				6	1
**********						
PURCHASING INFORMATION SYSTEM	173	1	3		65	17
STORES INVENTORY	189	1	1		55	3
EQUIPMENT INVENTORY	105				170	14
PARKING LOT SPACE ASSIGNMENT	142		1		6	1
CRIME REPORTING	149		1		2	1
MOTOR POOL RECORDS	144		1		11	1
**********						
PHYSICAL PLANT JOB SCHEDULING	232				11	1
EQUIPMENT PREVENTATIVE MAINTEN	215		1		15	1
**********						
GRADUATE ADMISSIONS PROCESSING	23				23	14
COURSE CATALOG RECORDS	85	1		4	151	55
STUDENT CLASS SCHEDULING	129			1	106	62
STUDENT REGISTRATION PROCESS.	40			2	214	80
TERM STUDENT RECORDS & REPORTS	18	1		2	278	32
ENROLLMENT REPORTING	28	1		2	274	31
STUDENT ETHNIC GROUP REPORTING	55		1	1	234	23
HONORS PROGRAM RECORDS	47		1	2	192	20
DEGREE REQUIREMENTS EVAL.	214		1	2	48	15
**********						
FINANCIAL AWARDS	196	2	3		68	22
WORK STUDY RECORDS	174	4	2		109	10
**********						
CATALOGING	226		1	1	34	14
CIRCULATION CONTROL	236	1		2	25	10
BIBLIOGRAPHICAL SEARCH SERVICE	202				13	12
EDUCATIONAL MEDIA SERVICES	215			1	35	8
**********						
FOUNDATION & GIFT RECORDS	159	1	5	2	25	3
CURRICULUM PLANNING	217			2	13	3
TEACHER PLACEMENT	178			1	2	8
STUDENT COUNSELING RECORDS	199			1	20	7
ATHELETIC EVENT TICKET SYSTEM	132			1	10	2
**********						
HOSPITAL CENSUS	11				1	1
APPOINTMENTS & SCHEDULING	12					
COMMUNICATIONS & ORDER ENTRY	11					
HOUSEKEEPING	13					
RADIOLOGY INFORMATION SYSTEM	9				1	1
NURSING STATION SUPPORT SYSTEM	9				1	
PATIENT BILLING/ACCTS. REC.	8					1

GROUP I   BACHELORS: 1

TOTAL NUMBER OF INSTITUTIONS = 801

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
********** PLANNING, MANAGEMENT & INSTITUTIONAL RESEARCH						
BUDGET FORECASTING	156	1	4	2	36	6
BUDGET ANALYSIS	128	1	3	3	67	8
INSTITUTIONAL COST STUDIES	121	1	3		69	6
SUPPORT STAFF SALARY ANALYSIS	124	1	2		51	6
SUPPORT STAFF ACTIVITY ANAL.	116		1		13	4
STUDENT FLOW MODELING	96				26	2
ENROLLMENT FORECASTING	143			2	34	7
DATA ELEMENT DICTIONARY	69	1			26	9
********** FINANCIAL MANAGEMENT APPLICATIONS						
GENERAL FUND LEDGER	37	25	29	4	119	11
DEPARTMENTAL EXPENDITURES	29	26	28	4	130	9
STUDENTS ACCTS. RECEIVABLE	45	23	21	4	119	12
PAYROLL	20	13	10	4	166	16
RETIREMENT SYSTEM ACCOUNTING	75	9	13	3	76	5
CASH FLOW PROJECTION	157	3	8	1	14	4
INVESTMENT EVALUATION	144	3	3		17	
RESEARCH PROJECT ACCOUNTING	80	6	9		26	2
FINANCIAL AID ACCOUNTING	69	13	18	3	101	10
RESIDENCE HALL ACCOUNTING	58	15	15	3	85	9
TELEPHONE ACCOUNTING	116	8	15	2	45	4
********** GENERAL ADMINISTRATIVE SERVICE APPLICATIONS						
FACILITIES INVENTORY (SPACE)	137			1	62	4
CLASSROOM UTILIZATION ANAL.	131				56	5
PERSONNEL EVALUATION	173			1	17	1
HEW COMPLIANCE REPORTING	149		2	2	48	1
CIVIL SERVICE POSITION RECORDS	92				10	1
********** AUXILIARY SERVICE APPLICATIONS						
FACULTY/STAFF DIRECTORY	135			1	59	9
RESIDENCE HALL ASSIGNMENT	148				28	6
STUDENT HOUSING REPORTS	107		1		61	8
BOOKSTORE INVENTORY & OPERATNS	150	2		2	32	
********** LOGISTICS AND RELATED SERVICES						
PURCHASE ORDER FOLLOW-UP	173	1	1	1	14	
VENDOR INFORMATION SYSTEM	118	1		2	46	2
OFFICE MACHINE REPAIR CONTROL	162		1	1	4	1
AUTOMOBILE REGISTRATION	160				25	3
TRAFFIC VIOLATION RECORDS	151		1	1	9	1
CAR POOL MATCHING	78	1			6	
********** PHYSICAL PLANT OPERATIONS						
PHYSICAL PLANT ACCOUNTING	107	9	17	2	57	3
BUILDING MAINTENANCE COSTS	135	7	12	2	34	1
KEY INVENTORY	168	1	1		15	
********** ADMISSIONS AND RECORDS APPLICATIONS						
UNDERGRAD. ADMISSIONS PROCESS.	94		1	3	101	27
HIGH SCHOOL TESTING RECORDS	100			1	69	20
SCHEDULE OF CLASSES PREPARATN.	116			2	87	16
TUITION & FEE ASSESSMENT	85	3	4	3	103	15
CLASS ROSTERS	36			2	174	22
COURSE ADD/DROP PROCESSING	62			8	129	29
ENROLLMENT STATISTICS	58			2	152	21
TERM GRADE REPORTING	37			4	173	22
STUDENT TRANSCRIPT RECORDS	95	1		1	112	11
CORRESPONDENCE COURSE RECORDS	60			1	10	2
********** FINANCIAL AID ADMINISTRATION						
FINANCIAL AID EVALUATION	155	2	1	2	45	5
STUDENT EMPLOYMENT RECORDS	128	3	2	2	73	9
********** LIBRARY APPLICATIONS						
ACQUISITIONS	172	1			18	10
CARD & MATERIAL PREP. & CONTRL	154				18	28
SERIALS HOLDINGS	156			3	27	7
FUGITIVE MATERIAL INDEXING	145	1			6	2
********** OTHER ADMINISTRATIVE APPLICATIONS						
ALUMNI RECORDS	72	1		1	132	20
TEST SCORING & ANALYSIS	126			1	52	3
TEACHER EVALUATION	125				60	4
FRATERNITY/SORORITY RUSH RECDS	69	1			6	1
STUDENT PSYCHOLOGICAL TESTING	137				12	1
********** HOSPITAL APPLICATIONS						
PATIENT REGISTRATION/ADMISSION	18					
MEDICAL RECORDS	17				1	
CENTRAL SUPPLY INVENTORY	18					
DIETARY/FOOD SERVICE	16					
LABORATORY INFORMATION SYSTEM	12					
PHARMACY INFORMATION SYSTEM	13					
PHYSICIAN SUPPORT SYSTEM	12					
HOSPITAL FINANCIAL INFO. SYSTM	10		1		2	

TOTAL NUMBER OF INSTITUTIONS REPORTING = 461

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
**********						
BUDGET PREPARATION	135	2	6	2	61	8
BUDGET POSITION CONTROL	100	5	7	3	71	8
FACULTY SALARY ANALYSIS	127	1	1		61	7
FACULTY ACTIVITY ANALYSIS	105	1			48	7
RESOURCE REQUIREMENTS MODELING	94				16	4
LONG RANGE PLANNING	149		1		27	5
HEGIS REPORTING	108	1	2	1	76	3
INSTITUTIONAL CODING STRUCTURE	85			1	35	5
**********						
GENERAL FUND EXPENDITURES	31	25	28	4	124	10
GENERAL ACCTS. RECEIVABLE	50	26	25	7	99	8
ACCOUNTS PAYABLE	49	24	27	4	109	8
EMPLOYEE BENEFIT ACCOUNTING	69	15	15	4	94	6
BANK ACCOUNT RECONCILIATION	137	10	10	5	42	4
INVESTMENT RECORDS	129	9	8	2	25	2
GRANT & CONTRACT ADMINISTRAT.	111	7	11	1	41	1
RESEARCH PROPOSAL MONITORING	96	3	3		8	1
TUITION & FEE ACCOUNTING	48	18	20	4	114	14
STORES ACCOUNTING	105	10	18	3	41	2
**********						
FACILITIES UTILIZATION ANAL.	134				47	2
PERSONNEL RECORDS	143		1		58	7
PERSONNEL PLACEMENT	171		1		7	1
STAFF ETHNIC GROUP REPORTING	150	1			36	
**********						
FACULTY CLUB BILLING	51	1			14	1
STUDENT DIRECTORY PREPARATION	75			3	110	16
FOOD SERVICE MENU & INVENTORY	142	1		1	5	1
**********						
PURCHASING INFORMATION SYSTEM	148		2	1	17	
STORES INVENTORY	157			1	15	
EQUIPMENT INVENTORY	139	1			47	3
PARKING LOT SPACE ASSIGNMENT	120				6	
CRIME REPORTING	132		1		3	
MOTOR POOL RECORDS	110	1			9	
**********						
PHYSICAL PLANT JOB SCHEDULING	178	1		1	3	
EQUIPMENT PREVENTATIVE MAINTEN	163		1	1	4	
**********						
GRADUATE ADMISSIONS PROCESSING	32				9	
COURSE CATALOG RECORDS	111			1	80	16
STUDENT CLASS SCHEDULING	121			2	73	19
STUDENT REGISTRATION PROCESS.	54			3	144	29
TERM STUDENT RECORDS & REPORTS	40			3	167	22
ENROLLMENT REPORTING	57			3	149	21
STUDENT ETHNIC GROUP REPORTING	86			1	109	15
HONORS PROGRAM RECORDS	89		1	1	77	6
DEGREE REQUIREMENTS EVAL.	174				30	4
**********						
FINANCIAL AWARDS	143	1	1	1	56	10
WORK STUDY RECORDS	122	4	1	2	78	7
**********						
CATALOGING	142				19	42
CIRCULATION CONTROL	187	1			8	1
BIBLIOGRAPHICAL SEARCH SERVICE	144		1		10	25
EDUCATIONAL MEDIA SERVICES	166			1	8	6
**********						
FOUNDATION & GIFT RECORDS	119	4		2	65	14
CURRICULUM PLANNING	172	1			7	
TEACHER PLACEMENT	156				2	
STUDENT COUNSELING RECORDS	161				9	
ATHELETIC EVENT TICKET SYSTEM	118				6	3
**********						
HOSPITAL CENSUS	15					
APPOINTMENTS & SCHEDULING	18					
COMMUNICATIONS & ORDER ENTRY	16					
HOUSEKEEPING	16					
RADIOLOGY INFORMATION SYSTEM	10					
NURSING STATION SUPPORT SYSTEM	13					
PATIENT BILLING/ACCTS. REC.	11				1	

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GROUP (        MASTERS:              )

     TOTAL NUMBER OF INSTITUTIONS =   717          TOTAL NUMBER OF INSTITUTIONS REPORTING   =   422

                                MAN- BKPG LEDG      BTCH   ON                                   MAN- BKPG LEDG      BTCH   ON
                                 UAL MCHN  ACC  EAM PROC LINE                                    UAL MCHN  ACC  EAM PROC LINE

**********  PLANNING, MANAGEMENT & INSTITUTIONAL RESEARCH       **********
BUDGET FORECASTING               161    1         1   73   15   BUDGET PREPARATION               126    2    6    1  107   21
BUDGET ANALYSIS                  109    3    3       125   19   BUDGET POSITION CONTROL           93    2    8       116   23
INSTITUTIONAL COST STUDIES       122    1    4       111   11   FACULTY SALARY ANALYSIS          116         2    1  124   14
SUPPORT STAFF SALARY ANALYSIS    130         2    1   99   15   FACULTY ACTIVITY ANALYSIS         97         1       106   11
SUPPORT STAFF ACTIVITY ANAL.     131         2        38    6   RESOURCE REQUIREMENTS MODELING   100         1        43    5
STUDENT FLOW MODELING             98                  56   10   LONG RANGE PLANNING              180                  34    7
ENROLLMENT FORECASTING           164    1             59    9   HEGIS REPORTING                   83              1  154   13
DATA ELEMENT DICTIONARY           73                  61   10   INSTITUTIONAL CODING STRUCTURE    73    1    2    1   72   14

**********  FINANCIAL MANAGEMENT APPLICATIONS                   **********
GENERAL FUND LEDGER               40   17   29    1  167   21   GENERAL FUND EXPENDITURES         30   14   22    1  183   22
DEPARTMENTAL EXPENDITURES         28   13   19    1  188   23   GENERAL ACCTS. RECEIVABLE         60   24   24    1  137   18
STUDENTS ACCTS. RECEIVABLE        49   21   17    2  150   31   ACCOUNTS PAYABLE                  55   16   20    2  142   23
PAYROLL                           17    6    7       206   25   EMPLOYEE BENEFIT ACCOUNTING       63    8   13       151   14
RETIREMENT SYSTEM ACCOUNTING      66    5    9       140   11   BANK ACCOUNT RECONCILIATION      135    5    8    1   82    9
CASH FLOW PROJECTION             158    5    7        32    6   INVESTMENT RECORDS               144    5    8        37    6
INVESTMENT EVALUATION            155    2    3        23    3   GRANT & CONTRACT ADMINISTRAT.    140    6   12    1   62   10
RESEARCH PROJECT ACCOUNTING       99    9   10    1   67   15   RESEARCH PROPOSAL MONITORING     155    2    5        13    3
FINANCIAL AID ACCOUNTING          65    9    9    1  157   23   TUITION & FEE ACCOUNTING          40   11   14       170   35
RESIDENCE HALL ACCOUNTING         60    9   15       118   25   STORES ACCOUNTING                133    5   13    1   76   11
TELEPHONE ACCOUNTING             131    5   11        88   12

**********  GENERAL ADMINISTRATIVE SERVICE APPLICATIONS         **********
FACILITIES INVENTORY (SPACE)     126    1    1    2  107   12   FACILITIES UTILIZATION ANAL.     133    1    1        92    7
CLASSROOM UTILIZATION ANAL.      122         1        99   13   PERSONNEL RECORDS                127              1  105   29
PERSONNEL EVALUATION             214                  27    2   PERSONNEL PLACEMENT              223                  10
HEW COMPLIANCE REPORTING         142         3        91    9   STAFF ETHNIC GROUP REPORTING     140         1        87   14
CIVIL SERVICE POSITION RECORDS   102                  28    3

**********  AUXILIARY SERVICE APPLICATIONS                      **********
FACULTY/STAFF DIRECTORY          119                 124   20   FACULTY CLUB BILLING              59    1    1         9    1
RESIDENCE HALL ASSIGNMENT        142         1    1   55   21   STUDENT DIRECTORY PREPARATION     45              1  169   25
STUDENT HOUSING REPORTS           82    1    1       114   19   FOOD SERVICE MENU & INVENTORY    166    1    2         8    3
BOOKSTORE INVENTORY & OPERATNS   170    4    5    1   35    4

**********  LOGISTICS AND RELATED SERVICES                      **********
PURCHASE ORDER FOLLOW-UP         205    1    1        26    8   PURCHASING INFORMATION SYSTEM    176    1    1        34   10
VENDOR INFORMATION SYSTEM        139    1    2        63   15   STORES INVENTORY                 176    2    3    1   34    3
OFFICE MACHINE REPAIR CONTROL    190    1    1        10        EQUIPMENT INVENTORY              127    2    2        99    9
AUTOMOBILE REGISTRATION          170         1        45    5   PARKING LOT SPACE ASSIGNMENT     155                   7
TRAFFIC VIOLATION RECORDS        170         2        26    4   CRIME REPORTING                  172         1         4
CAR POOL MATCHING                 87              1   18        MOTOR POOL RECORDS               143                  15

**********  PHYSICAL PLANT OPERATIONS                           **********
PHYSICAL PLANT ACCOUNTING        148    6    9        71    9   PHYSICAL PLANT JOB SCHEDULING    223                   5
BUILDING MAINTENANCE COSTS       181    4    2        43    6   EQUIPMENT PREVENTATIVE MAINTEN   206                  14    1
KEY INVENTORY                    209         2    1   18    1

**********  ADMISSIONS AND RECORDS APPLICATIONS                 **********
UNDERGRAD. ADMISSIONS PROCESS.    59    1            161   48   GRADUATE ADMISSIONS PROCESSING    79                 124   37
HIGH SCHOOL TESTING RECORDS       75              1  128   29   COURSE CATALOG RECORDS            82         1    1  145   36
SCHEDULE OF CLASSES PREPARATN.    86              1  149   32   STUDENT CLASS SCHEDULING          94                 125   29
TUITION & FEE ASSESSMENT          67    2    4       149   42   STUDENT REGISTRATION PROCESS.     32              1  202   43
CLASS ROSTERS                     23                 225   33   TERM STUDENT RECORDS & REPORTS    23                 220   33
COURSE ADD/DROP PROCESSING        35              1  186   53   ENROLLMENT REPORTING              30                 221   30
ENROLLMENT STATISTICS             31                 217   30   STUDENT ETHNIC GROUP REPORTING    46                 191   28
TERM GRADE REPORTING              19                 231   28   HONORS PROGRAM RECORDS            72                 149   14
STUDENT TRANSCRIPT RECORDS       102    1            144   20   DEGREE REQUIREMENTS EVAL.        206                  36    7
CORRESPONDENCE COURSE RECORDS     77                  34    5

**********  FINANCIAL AID ADMINISTRATION                        **********
FINANCIAL AID EVALUATION         184    1             55   15   FINANCIAL AWARDS                 148    2             93   16
STUDENT EMPLOYMENT RECORDS       120    1    4       120   14   WORK STUDY RECORDS               114    1    3       132   15

**********  LIBRARY APPLICATIONS                                **********
ACQUISITIONS                     188    1             42   13   CATALOGING                       159                  26   56
CARD & MATERIAL PREP. & CONTRL   166                  27   42   CIRCULATION CONTROL              207                  24    8
SERIALS HOLDINGS                 159              3   73    8   BIBLIOGRAPHICAL SEARCH SERVICE   158                  24   43
FUGITIVE MATERIAL INDEXING       175                   5    4   EDUCATIONAL MEDIA SERVICES       189              1   23    5

**********  OTHER ADMINISTRATIVE APPLICATIONS                   **********
ALUMNI RECORDS                    65    1            179   31   FOUNDATION & GIFT RECORDS        123         5        97   21
TEST SCORING & ANALYSIS          102         1    4  117    9   CURRICULUM PLANNING              200                  14    1
TEACHER EVALUATION               114              1  123    6   TEACHER PLACEMENT                186                  10    2
FRATERNITY/SORORITY RUSH RECDS   121                   6    3   STUDENT COUNSELING RECORDS       195                  18    1
STUDENT PSYCHOLOGICAL TESTING    167              2   15    1   ATHELETIC EVENT TICKET SYSTEM    157         1        20

**********  HOSPITAL APPLICATIONS                               **********
PATIENT REGISTRATION/ADMISSION    25                  10    1   HOSPITAL CENSUS                   22                   5    1
MEDICAL RECORDS                   30                   8        APPOINTMENTS & SCHEDULING         32                   1    1
CENTRAL SUPPLY INVENTORY          30         1         2        COMMUNICATIONS & ORDER ENTRY      27                   1
DIETARY/FOOD SERVICE              28                            HOUSEKEEPING                      32
LABORATORY INFORMATION SYSTEM     23         1         2        RADIOLOGY INFORMATION SYSTEM      20         1         2
PHARMACY INFORMATION SYSTEM       24         1         1        NURSING STATION SUPPORT SYSTEM    24         1         2
PHYSICIAN SUPPORT SYSTEM          24         1         1        PATIENT BILLING/ACCTS. REC.       15         1        12
HOSPITAL FINANCIAL INFO. SYSTM    18         1         7
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INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
                CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
                        WITH SUPPORT FROM THE NATIONAL SCIENCE FOUNDATION

     GROUP I          DOCTORATE:         I

          TOTAL NUMBER OF INSTITUTIONS =   422

                               MAN- BKPG LEDG      BTCH   ON
                                UAL MCHN  ACC  EAM PROC LINE

**********  PLANNING, MANAGEMENT & INSTITUTIONAL RESEARCH
BUDGET FORECASTING              108    1             69   13
BUDGET ANALYSIS                  74    1    3       106   15
INSTITUTIONAL COST STUDIES       71    2            101   15
SUPPORT STAFF SALARY ANALYSIS    56    1            123   17
SUPPORT STAFF ACTIVITY ANAL.     92                  45    8
STUDENT FLOW MODELING            60                  68    6
ENROLLMENT FORECASTING          107                  68    5
DATA ELEMENT DICTIONARY          57                  57   19

**********  FINANCIAL MANAGEMENT APPLICATIONS
GENERAL FUND LEDGER              13   13   12       151   19
DEPARTMENTAL EXPENDITURES        12    7    6    1  155   26
STUDENTS ACCTS. RECEIVABLE       24    9    7    1  137   23
PAYROLL                           5         3       164   34
RETIREMENT SYSTEM ACCOUNTING     32    1    1       137   17
CASH FLOW PROJECTION            117    1    1        53    2
INVESTMENT EVALUATION           128    1    1    1   31    2
RESEARCH PROJECT ACCOUNTING      44    8    5       116   16
FINANCIAL AID ACCOUNTING         31    3    2    2  146   20
RESIDENCE HALL ACCOUNTING        26   10    1    4  119   19
TELEPHONE ACCOUNTING             54    4    1    2  121   11

**********  GENERAL ADMINISTRATIVE SERVICE APPLICATIONS
FACILITIES INVENTORY (SPACE)     46    1            132   18
CLASSROOM UTILIZATION ANAL.      62    1            110   12
PERSONNEL EVALUATION            155                  26    4
HEW  COMPLIANCE REPORTING        72                 118    4
CIVIL SERVICE POSITION RECORDS   61                  35    9

**********  AUXILIARY SERVICE APPLICATIONS
FACULTY/STAFF DIRECTORY          53                 127   18
RESIDENCE HALL ASSIGNMENT        90              1   64   18
STUDENT HOUSING REPORTS          51    1    1    1  108   11
BOOKSTORE INVENTORY & OPERATNS   94    4    2        50   12

**********  LOGISTICS AND RELATED SERVICES
PURCHASE ORDER FOLLOW-UP        124                  47   14
VENDOR INFORMATION SYSTEM        97                  67   23
OFFICE MACHINE REPAIR CONTROL   143                  16    1
AUTOMOBILE REGISTRATION          99              1   60   12
TRAFFIC VIOLATION RECORDS       105    1         2   38   14
CAR POOL MATCHING                67                  28    2

**********  PHYSICAL PLANT OPERATIONS
PHYSICAL PLANT ACCOUNTING        71    4    5    2  100   11
BUILDING MAINTENANCE COSTS      113    2    2        64    4
KEY INVENTORY                   150         1    1   26    1

**********  ADMISSIONS AND RECORDS APPLICATIONS
UNDERGRAD. ADMISSIONS PROCESS.   20                 117   56
HIGH SCHOOL TESTING RECORDS      35                 114   27
SCHEDULE OF CLASSES PREPARATN.   53                 115   38
TUITION & FEE ASSESSMENT         41                 145   17
CLASS ROSTERS                    12                 179   17
COURSE ADD/DROP PROCESSING       17                 141   48
ENROLLMENT STATISTICS            19                 181    8
TERM GRADE REPORTING             17                 171   20
STUDENT TRANSCRIPT RECORDS       81    1             95   18
CORRESPONDENCE COURSE RECORDS    71              1   31    8

**********  FINANCIAL AID ADMINISTRATION
FINANCIAL AID EVALUATION        101              1   74   18
STUDENT EMPLOYMENT RECORDS       72    1             96   19

**********  LIBRARY APPLICATIONS
ACQUISITIONS                     96    2    1    1   60   17
CARD & MATERIAL PREP. & CONTRL   92              3   43   34
SERIALS HOLDINGS                 74    1             84   20
FUGITIVE MATERIAL INDEXING      125                   7    7

**********  OTHER ADMINISTRATIVE APPLICATIONS
ALUMNI RECORDS                   27    1            137   35
TEST SCORING & ANALYSIS          43    1         4  121    9
TEACHER EVALUATION               82              2   80    1
FRATERNITY/SORORITY RUSH RECDS   82              2   25
STUDENT PSYCHOLOGICAL TESTING   115                  23

**********  HOSPITAL APPLICATIONS
PATIENT REGISTRATION/ADMISSION   24    1             13   29
MEDICAL RECORDS                  34    1             18   13
CENTRAL SUPPLY INVENTORY         37    1             19    7
DIETARY/FOOD SERVICE             41                   9    5
LABORATORY. INFORMATION SYSTEM   29                   3   24
PHARMACY INFORMATION SYSTEM      35         1         7   15
PHYSICIAN SUPPORT SYSTEM         38                   5    7
HOSPITAL FINANCIAL INFO. SYSTM   15    1         1   41    3

TOTAL NUMBER OF INSTITUTIONS REPORTING   =   284

                               MAN- BKPG LEDG      BTCH   ON
                                UAL MCHN  ACC  EAM PROC LINE

**********
BUDGET PREPARATION               59    2            118   31
BUDGET POSITION CONTROL          65    3    3        87   30
FACULTY SALARY ANALYSIS          46    1            139   17
FACULTY ACTIVITY ANALYSIS        59    1            103   12
RESOURCE REQUIREMENTS MODELING   80                  49    7
LONG RANGE PLANNING             128                  30    4
HEGIS  REPORTING                 56    1            120    7
INSTITUTIONAL CODING STRUCTURE   49                  84   15

**********
GENERAL FUND EXPENDITURES         7   11    9       155   24
GENERAL ACCTS. RECEIVABLE        28   10   13       130   14
ACCOUNTS PAYABLE                 31   10    4    2  137   20
EMPLOYEE BENEFIT ACCOUNTING      29    1    1       148   20
BANK ACCOUNT RECONCILIATION      54    3         3  127    7
INVESTMENT RECORDS               99    2    7    2   57    7
GRANT & CONTRACT ADMINISTRAT.    74    4    2        99   17
RESEARCH PROPOSAL MONITORING    119    3             49    5
TUITION & FEE ACCOUNTING         17    7    1    1  164   15
STORES ACCOUNTING                54    8    4        98   15

**********
FACILITIES UTILIZATION ANAL.     59    1            115   12
PERSONNEL RECORDS                45                 120   40
PERSONNEL PLACEMENT             154                  15    3
STAFF ETHNIC GROUP REPORTING     61                 126    6

**********
FACULTY CLUB BILLING             48    1             26    1
STUDENT DIRECTORY PREPARATION    23                 151   13
FOOD SERVICE MENU & INVENTORY   124    1         1   19    6

**********
PURCHASING INFORMATION SYSTEM   112    1             48   20
STORES INVENTORY                102         1    1   67   13
EQUIPMENT INVENTORY              58              2  114   13
PARKING LOT SPACE ASSIGNMENT    113              1   24    4
CRIME REPORTING                 127                  10    5
MOTOR POOL RECORDS              106                  21    1

**********
PHYSICAL PLANT JOB SCHEDULING   141         1    1   36    6
EQUIPMENT PREVENTATIVE MAINTEN  148         1        27    2

**********
GRADUATE ADMISSIONS PROCESSING   52              1  100   50
COURSE CATALOG RECORDS           47              1  114   41
STUDENT CLASS SCHEDULING         63                 111   23
STUDENT REGISTRATION PROCESS.    21                 144   40
TERM STUDENT RECORDS & REPORTS   15                 173   17
ENROLLMENT REPORTING             19                 176   10
STUDENT ETHNIC GROUP REPORTING   29                 162    7
HONORS PROGRAM RECORDS           50                 125    7
DEGREE REQUIREMENTS EVAL.       134                  50    5

**********
FINANCIAL AWARDS                 80                  97   20
WORK STUDY RECORDS               67    1            101   15

**********
CATALOGING                       79    1             39   57
CIRCULATION CONTROL             106                  52   22
BIBLIOGRAPHICAL SEARCH SERVICE   80                  29   55
EDUCATIONAL MEDIA SERVICES      118                  21   16

**********
FOUNDATION & GIFT RECORDS        62    1            105   33
CURRICULUM PLANNING             150                  16    1
TEACHER PLACEMENT               135         1        11    2
STUDENT COUNSELING RECORDS      135                  17    1
ATHELETIC EVENT TICKET SYSTEM    95              1   27    7

**********
HOSPITAL CENSUS                  19    1             23   18
APPOINTMENTS & SCHEDULING        45    1              3   13
COMMUNICATIONS & ORDER ENTRY     41    1              5    8
HOUSEKEEPING                     53                   2    1
RADIOLOGY INFORMATION SYSTEM     36                   7   11
NURSING STATION SUPPORT SYSTEM   37                   4    8
PATIENT BILLING/ACCTS. REC.      10    1             42   12
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GROUP (BELOW 500)

TOTAL NUMBER OF INSTITUTIONS = 662   TOTAL NUMBER OF INSTITUTIONS REPORTING = 392

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
********** PLANNING, MANAGEMENT & INSTITUTIONAL RESEARCH						
BUDGET FORECASTING	37		1		5	1
BUDGET ANALYSIS	25	1	1		16	
INSTITUTIONAL COST STUDIES	27				10	4
SUPPORT STAFF SALARY ANALYSIS	28				8	4
SUPPORT STAFF ACTIVITY ANAL.	26				3	
STUDENT FLOW MODELING	20				2	3
ENROLLMENT FORECASTING	35				1	1
DATA ELEMENT DICTIONARY	15				3	4
********** FINANCIAL MANAGEMENT APPLICATIONS						
GENERAL FUND LEDGER	13	3	10		20	3
DEPARTMENTAL EXPENDITURES	11	1	8		21	3
STUDENTS ACCTS. RECEIVABLE	20	1	7		17	3
PAYROLL	7		5		27	6
RETIREMENT SYSTEM ACCOUNTING	15		6		10	3
CASH FLOW PROJECTION	30	1	2		3	1
INVESTMENT EVALUATION	29		1		3	
RESEARCH PROJECT ACCOUNTING	13		1		3	4
FINANCIAL AID ACCOUNTING	23	1	7		9	4
RESIDENCE HALL ACCOUNTING	16	1	2		7	4
TELEPHONE ACCOUNTING	24	2	4		4	3
********** GENERAL ADMINISTRATIVE SERVICE APPLICATIONS						
FACILITIES INVENTORY (SPACE)	28				4	5
CLASSROOM UTILIZATION ANAL.	27				5	3
PERSONNEL EVALUATION	37				2	
HEW COMPLIANCE REPORTING	32		1		4	3
CIVIL SERVICE POSITION RECORDS	21				2	
********** AUXILIARY SERVICE APPLICATIONS						
FACULTY/STAFF DIRECTORY	29				7	3
RESIDENCE HALL ASSIGNMENT	27					3
STUDENT HOUSING REPORTS	24				2	3
BOOKSTORE INVENTORY & OPERATNS	29	1	1		2	3
********** LOGISTICS AND RELATED SERVICES						
PURCHASE ORDER FOLLOW-UP	31		1		4	3
VENDOR INFORMATION SYSTEM	23		1		10	3
OFFICE MACHINE REPAIR CONTROL	34					
AUTOMOBILE REGISTRATION	28				1	
TRAFFIC VIOLATION RECORDS	22					
CAR POOL MATCHING	9					
********** PHYSICAL PLANT OPERATIONS						
PHYSICAL PLANT ACCOUNTING	25	1	5		8	3
BUILDING MAINTENANCE COSTS	27	1	2		7	3
KEY INVENTORY	38		1		2	
********** ADMISSIONS AND RECORDS APPLICATIONS						
UNDERGRAD. ADMISSIONS PROCESS.	23				7	2
HIGH SCHOOL TESTING RECORDS	20				4	
SCHEDULE OF CLASSES PREPARATN.	31				9	4
TUITION & FEE ASSESSMENT	29		1		5	4
CLASS ROSTERS	20				19	5
COURSE ADD/DROP PROCESSING	27				12	4
ENROLLMENT STATISTICS	27				17	6
TERM GRADE REPORTING	16				20	6
STUDENT TRANSCRIPT RECORDS	26				16	3
CORRESPONDENCE COURSE RECORDS	12				2	
********** FINANCIAL AID ADMINISTRATION						
FINANCIAL AID EVALUATION	32		1	1	7	3
STUDENT EMPLOYMENT RECORDS	32		2		4	4
********** LIBRARY APPLICATIONS						
ACQUISITIONS	42				2	1
CARD & MATERIAL PREP. & CONTRL	38					4
SERIALS HOLDINGS	38					
FUGITIVE MATERIAL INDEXING	32					
********** OTHER ADMINISTRATIVE APPLICATIONS						
ALUMNI RECORDS	32				11	4
TEST SCORING & ANALYSIS	26			1	10	1
TEACHER EVALUATION	33				4	
FRATERNITY/SORORITY RUSH RECDS	5					
STUDENT PSYCHOLOGICAL TESTING	25					
********** HOSPITAL APPLICATIONS						
PATIENT REGISTRATION/ADMISSION	4				3	1
MEDICAL RECORDS	7				1	
CENTRAL SUPPLY INVENTORY	6				1	
DIETARY/FOOD SERVICE	6					
LABORATORY INFORMATION SYSTEM	4				1	2
PHARMACY INFORMATION SYSTEM	5					1
PHYSICIAN SUPPORT SYSTEM	6					
HOSPITAL FINANCIAL INFO. SYSTM	3				3	

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
**********						
BUDGET PREPARATION	29		2		10	3
BUDGET POSITION CONTROL	17		4		15	3
FACULTY SALARY ANALYSIS	28				8	4
FACULTY ACTIVITY ANALYSIS	23				7	3
RESOURCE REQUIREMENTS MODELING	24					
LONG RANGE PLANNING	36					1
HEGIS REPORTING	30				5	3
INSTITUTIONAL CODING STRUCTURE	17				4	3
**********						
GENERAL FUND EXPENDITURES	12	1	10		22	3
GENERAL ACCTS. RECEIVABLE	13	1	8		17	3
ACCOUNTS PAYABLE	15	2	8		16	3
EMPLOYEE BENEFIT ACCOUNTING	18		7		15	3
BANK ACCOUNT RECONCILIATION	32		2		2	3
INVESTMENT RECORDS	25	1	1		4	3
GRANT & CONTRACT ADMINISTRAT.	22	2	2		3	3
RESEARCH PROPOSAL MONITORING	20		2			
TUITION & FEE ACCOUNTING	18	2	6		13	4
STORES ACCOUNTING	20	1	5		5	3
**********						
FACILITIES UTILIZATION ANAL.	26				5	3
PERSONNEL RECORDS	33				8	4
PERSONNEL PLACEMENT	37					
STAFF ETHNIC GROUP REPORTING	29				5	3
**********						
FACULTY CLUB BILLING	7				1	
STUDENT DIRECTORY PREPARATION	27				7	3
FOOD SERVICE MENU & INVENTORY	25					
**********						
PURCHASING INFORMATION SYSTEM	31				2	3
STORES INVENTORY	29		1		4	
EQUIPMENT INVENTORY	29				7	4
PARKING LOT SPACE ASSIGNMENT	29					
CRIME REPORTING	16					
MOTOR POOL RECORDS	17					
**********						
PHYSICAL PLANT JOB SCHEDULING	36				1	
EQUIPMENT PREVENTATIVE MAINTEN	35				1	
**********						
GRADUATE ADMISSIONS PROCESSING	23				2	3
COURSE CATALOG RECORDS	28				9	4
STUDENT CLASS SCHEDULING	30				9	5
STUDENT REGISTRATION PROCESS.	23				15	7
TERM STUDENT RECORDS & REPORTS	20				21	4
ENROLLMENT REPORTING	28				16	5
STUDENT ETHNIC GROUP REPORTING	27				9	3
HONORS PROGRAM RECORDS	22				7	
DEGREE REQUIREMENTS EVAL.	40					
**********						
FINANCIAL AWARDS	33		1		4	3
WORK STUDY RECORDS	27		2		3	4
**********						
CATALOGING	37				1	4
CIRCULATION CONTROL	42					
BIBLIOGRAPHICAL SEARCH SERVICE	28				2	5
EDUCATIONAL MEDIA SERVICES	34				1	
**********						
FOUNDATION & GIFT RECORDS	33	1			3	4
CURRICULUM PLANNING	39					
TEACHER PLACEMENT	32					
STUDENT COUNSELING RECORDS	31				1	
ATHELETIC EVENT TICKET SYSTEM	13					
**********						
HOSPITAL CENSUS	3				4	
APPOINTMENTS & SCHEDULING	6				1	
COMMUNICATIONS & ORDER ENTRY	6					
HOUSEKEEPING	6					
RADIOLOGY INFORMATION SYSTEM	3				2	
NURSING STATION SUPPORT SYSTEM	4					
PATIENT BILLING/ACCTS. REC.	2				4	1

INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
WITH SUPPORT FROM THE NATIONAL SCIENCE FOUNDATION

GROUP (500-2499)

TOTAL NUMBER OF INSTITUTIONS = 1382

TOTAL NUMBER OF INSTITUTIONS REPORTING = 779

	MAN- UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
********** PLANNING, MANAGEMENT & INSTITUTIONAL RESEARCH						
BUDGET FORECASTING	297	4	5	2	69	16
BUDGET ANALYSIS	231	7	8	3	136	22
INSTITUTIONAL COST STUDIES	234	7	9		124	13
SUPPORT STAFF SALARY ANALYSIS	250	3	6		100	12
SUPPORT STAFF ACTIVITY ANAL.	246		3		22	6
STUDENT FLCW MODELING	188				44	4
ENROLLMENT FORECASTING	283	1		1	60	7
DATA ELEMENT DICTIONARY	130				43	11
********** FINANCIAL MANAGEMENT APPLICATIONS						
GENERAL FUND LEDGER	83	46	49	5	224	39
DEPARTMENTAL EXPENDITURES	68	42	42	5	250	36
STUDENTS ACCTS. RECEIVABLE	119	51	36	4	196	26
PAYROLL	39	27	18	4	316	39
RETIREMENT SYSTEM ACCOUNTING	138	20	21	3	176	17
CASH FLOW PROJECTION	282	10	17	1	40	10
INVESTMENT EVALUATION	265	8	9		33	1
RESEARCH PROJECT ACCOUNTING	152	19	17	1	66	9
FINANCIAL AID ACCOUNTING	155	22	24	2	186	28
RESIDENCE HALL ACCOUNTING	120	23	26	3	126	21
TELEPHONE ACCOUNTING	234	15	23	2	85	12
********** GENERAL ADMINISTRATIVE SERVICE APPLICATIONS						
FACILITIES INVENTORY (SPACE)	251	1	1	2	125	10
CLASSROOM UTILIZATION ANAL.	242		1		110	10
PERSONNEL EVALUATION	341		1		25	3
HEW COMPLIANCE REPORTING	295		2	2	80	6
CIVIL SERVICE POSITION RECORDS	178				16	2
********** AUXILIARY SERVICE APPLICATIONS						
FACULTY/STAFF DIRECTORY	267	1		1	106	20
RESIDENCE HALL ASSIGNMENT	247				42	11
STUDENT HOUSING REPORTS	193			1	86	17
BOOKSTORE INVENTORY & OPERATNS	309	5	2	2	38	5
********** LOGISTICS AND RELATED SERVICES						
PURCHASE ORDER FOLLOW-UP	321	2	1	1	44	7
VENDOR INFORMATION SYSTEM	227	2		2	89	11
OFFICE MACHINE REPAIR CONTROL	302	1	1	1	8	2
AUTOMOBILE REGISTRATION	293			1	38	7
TRAFFIC VIOLATION RECORDS	268		2		17	3
CAR POOL MATCHING	150				11	
********** PHYSICAL PLANT OPERATIONS						
PHYSICAL PLANT ACCOUNTING	205	17	22	2	112	15
BUILDING MAINTENANCE COSTS	257	14	13	1	70	10
KEY INVENTORY	325		1		25	1
********** ADMISSIONS AND RECORDS APPLICATIONS						
UNDERGRAD. ADMISSIONS PROCESS.	179	2		3	192	60
HIGH SCHOOL TESTING RECORDS	203			1	115	35
SCHEDULE OF CLASSES PREPARATN.	219			3	167	35
TUITION & FEE ASSESSMENT	182	7	8	3	177	39
CLASS ROSTERS	62			4	348	45
COURSE ADD/DROP PROCESSING	112			8	261	60
ENROLLMENT STATISTICS	104	1		2	303	40
TERM GRADE REPORTING	69			5	344	42
STUDENT TRANSCRIPT RECORDS	168			2	225	29
CORRESPONDENCE COURSE RECORDS	127			1	25	2
********** FINANCIAL AID ADMINISTRATION						
FINANCIAL AID EVALUATION	311	2		1	65	17
STUDENT EMPLOYMENT RECORDS	243	6	1	2	131	16
********** LIBRARY APPLICATIONS						
ACQUISITIONS	333	1			30	17
CARD & MATERIAL PREP. & CONTRL	304				28	44
SERIALS HOLDINGS	297			2	53	16
FUGITIVE MATERIAL INDEXING	279				6	4
********** OTHER ADMINISTRATIVE APPLICATIONS						
ALUMNI RECORDS	140	2		2	213	39
TEST SCORING & ANALYSIS	223	1		1	103	12
TEACHER EVALUATION	228			1	110	8
FRATERNITY/SORORITY RUSH RECDS	116	1			5	3
STUDENT PSYCHOLOGICAL TESTING	237				20	2
********** HOSPITAL APPLICATIONS						
PATIENT REGISTRATION/ADMISSION	33				10	10
MEDICAL RECORDS	36				11	4
CENTRAL SUPPLY INVENTORY	37		1		5	3
DIETARY/FOOD SERVICE	37				3	1
LABORATORY INFORMATION SYSTEM	29		1		2	7
PHARMACY INFORMATION SYSTEM	31		2		2	4
PHYSICIAN SUPPORT SYSTEM	26		1		2	3
HOSPITAL FINANCIAL INFO. SYSTM	18		2	1	16	2

	MAN- UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
**********						
BUDGET PREPARATION	258	6	8	3	115	29
BUDGET POSITION CONTROL	176	12	16	3	143	28
FACULTY SALARY ANALYSIS	245	4	5		122	13
FACULTY ACTIVITY ANALYSIS	214	1	1		91	16
RESOURCE REQUIREMENTS MODELING	199		1		30	5
LONG RANGE PLANNING	295		2		37	8
HEGIS REPORTING	208	2	2	1	145	13
INSTITUTIONAL CODING STRUCTURE	157		2	1	66	13
**********						
GENERAL FUND EXPENDITURES	65	44	46	5	241	40
GENERAL ACCTS. RECEIVABLE	120	53	42	6	174	27
ACCOUNTS PAYABLE	116	42	40	4	187	31
EMPLOYEE BENEFIT ACCCUNTING	133	25	26	4	191	20
BANK ACCOUNT RECONCILIATION	262	19	18	4	92	11
INVESTMENT RECORDS	249	14	16	3	53	7
GRANT & CONTRACT ADMINISTRAT.	230	15	20	2	69	10
RESEARCH PROPOSAL MONITORING	199	8	6		17	4
TUITION & FEE ACCOUNTING	116	36	30	4	204	38
STORES ACCOUNTING	214	15	28	4	78	14
**********						
FACILITIES UTILIZATION ANAL.	247	1	1		103	5
PERSONNEL RECORDS	281	1	3		98	16
PERSONNEL PLACEMENT	332		2		8	1
STAFF ETHNIC GROUP REPORTING	279				67	7
**********						
FACULTY CLUB BILLING	98	1	1		20	1
STUDENT DIRECTORY PREPARATION	141			3	181	32
FOOD SERVICE MENU & INVENTORY	257	1	1	1	8	3
**********						
PURCHASING INFORMATION SYSTEM	276	1	2	1	43	7
STORES INVENTORY	305	2		1	30	3
EQUIPMENT INVENTORY	234	1	1		120	14
PARKING LOT SPACE ASSIGNMENT	226				7	
CRIME REPORTING	244				3	
MOTOR POOL RECORDS	211	1			10	1
**********						
PHYSICAL PLANT JOB SCHEDULING	337	1			12	1
EQUIPMENT PREVENTATIVE MAINTEN	308				13	2
**********						
GRADUATE ADMISSIONS PROCESSING	87				49	19
COURSE CATALOG RECORDS	207	1	1	3	156	34
STUDENT CLASS SCHEDULING	236			2	134	37
STUDENT REGISTRATION PROCESS.	104			4	277	64
TERM STUDENT RECORDS & REPORTS	70	1		4	330	43
ENROLLMENT REPORTING	96	1		4	305	42
STUDENT ETHNIC GROUP REPORTING	153			1	231	32
HONORS PROGRAM RECORDS	149			2	183	14
DEGREE REQUIREMENTS EVAL.	321				60	11
**********						
FINANCIAL AWARDS	288	2	1	1	84	23
WORK STUDY RECORDS	235	7	2	2	142	16
**********						
CATALOGING	286				29	65
CIRCULATION CONTROL	357	2			12	2
BIBLIOGRAPHICAL SEARCH SERVICE	274				19	45
EDUCATIONAL MEDIA SERVICES	317			1	20	8
**********						
FOUNDATION & GIFT RECORDS	210	3	4	2	111	27
CURRICULUM PLANNING	314	1			9	2
TEACHER PLACEMENT	270				3	1
STUDENT COUNSELING RECORDS	298				17	2
ATHELETIC EVENT TICKET SYSTEM	211		1		11	3
**********						
HOSPITAL CENSUS	27				10	6
APPOINTMENTS & SCHEDULING	40				2	6
COMMUNICATIONS & ORDER ENTRY	38				1	2
HOUSEKEEPING	43					
RADIOLOGY INFORMATION SYSTEM	31		1		4	2
NURSING STATION SUPPORT SYSTEM	30		1		2	3
PATIENT BILLING/ACCTS. REC.	19		1		18	5

GROUP (2500-9999)

TOTAL NUMBER OF INSTITUTIONS = 775

TOTAL NUMBER OF INSTITUTICNS REPORTING = 443

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINF
*********** PLANNING, MANAGEMENT & INSTITUTIONAL RESEARCH						
BUDGET FORECASTING	201	1	2	1	110	15
BUDGET ANALYSIS	139	3	3	1	178	24
INSTITUTIONAL COST STUDIES	134	1	2		181	12
SUPPORT STAFF SALARY ANALYSIS	137	1			166	22
SUPPORT STAFF ACTIVITY ANAL.	146				65	11
STUDENT FLOW MODELING	112			1	77	13
ENROLLMENT FCRECASTING	193			3	97	15
DATA ELFMENT DICTIONARY	83	1			105	23
*********** FINANCIAL MANAGEMENT APPLICATIONS						
GENERAL FUND LEDGER	51	16	27		243	28
DEPARTMENTAL EXPENDITURES	34	14	18		268	34
STUDENTS ACCTS. RECEIVABLF	71	11	20	3	204	45
PAYROLL	20	4	5		300	29
RETIREMENT SYSTEM ACCOUNTING	80	4	3		217	15
CASH FLOW PROJECTION	217	3	7		59	4
INVESTMENT EVALUATION	204	2	2		31	4
RESEARCH PRCJECT ACCOUNTING	123	7	8		99	14
FINANCIAL AID ACCOUNTING	80	9	8	3	224	30
RESIDENCE HALL ACCOUNTING	56	11	8	2	132	21
TELEPHONE ACCCUNTING	166	7	8	2	118	12
*********** GENERAL ADMINISTRATIVE SERVICE APPLICATIONS						
FACILITIES INVENTORY (SPACE)	139	1		4	189	14
CLASSROOM UTILIZATION ANAL.	138	1		1	179	18
PERSONNEL EVALUATION	279			1	46	3
HEW COMPLIANCE REPORTING	180		2	1	147	5
CIVIL SERVICE POSITION RECORDS	122				52	5
*********** AUXILIARY SERVICE APPLICATIONS						
FACULTY/STAFF DIRECTORY	152				177	17
RESIDENCE HALL ASSIGNMENT	127		1	1	69	15
STUDENT HOUSING REPORTS	71	2	3		127	11
BOOKSTORE INVENTORY & OPERATNS	197	2	4	1	82	6
*********** LOGISTICS AND RELATED SERVICES						
PURCHASE CRDER FOLLOW-UP	257	1	3		53	10
VENDOR INFORMATION SYSTEM	168	2	3		115	30
OFFICE MACHINE REPAIR CONTROL	244	1	2		19	
AUTOMOBILE REGISTRATION	221		2	1	67	9
TRAFFIC VIOLATION RECORDS	233	1	3	1	29	8
CAR POCL MATCHING	115	1			28	1
*********** PHYSICAL PLANT OPERATIONS						
PHYSICAL PLANT ACCOUNTING	191	6	4	1	99	11
BUILDING MAINTENANCE COSTS	231	3	4	1	65	5
KEY INVENTORY	266	1	1	3	35	5
*********** ADMISSIONS AND RECORDS APPLICATIONS						
UNDERGRAD. ADMISSIONS PROCESS.	56		1	2	227	85
HIGH SCHOOL TESTING RECORDS	91			2	159	42
SCHEDULE OF CLASSES PREPARATN.	78			2	228	59
TUITION & FEE ASSESSMENT	90		2		215	60
CLASS ROSTERS	1			1	333	46
COURSE ADD/CRCP PROCESSING	14			2	269	98
ENROLLMENT STATISTICS	7			1	336	39
TERM GRADE REPORTING	3			2	334	42
STUDENT TRANSCRIPT RECORDS	103	2	1	2	217	39
CORRESPONCENCE COURSE RECCRDS	100				47	11
*********** FINANCIAL AID ADMINISTRATION						
FINANCIAL AID EVALUATION	239	3	2	2	83	13
STUDENT EMPLOYMENT RECORDS	177		3		151	16
*********** LIBRARY APPLICATICNS						
ACQUISITIONS	236	1	1	2	72	18
CARD & MATERIAL PREP. & CONTRL	234		1	1	45	32
SERIALS HOLDINGS	216		1	4	86	10
FUGITIVE MATERIAL INDEXING	226	1			13	6
*********** OTHER ADMINISTRATIVE APPLICATIONS						
ALUMNI RECORDS	84	1	1	3	206	30
TEST SCORING & ANALYSIS	113	1	1	7	177	14
TEACHER EVALUATION	148			2	170	7
FRATERNITY/SORORITY RUSH RECDS	128			1	14	2
STUDENT PSYCHOLOGICAL TESTING	202			4	31	1
*********** HOSPITAL APPLICATIONS						
PATIENT REGISTRATION/ADMISSION	26				6	5
MEDICAL RECORDS	30				4	1
CENTRAL SUPPLY INVENTORY	27				6	
DIETARY/FOOD SERVICE	24				3	
LABORATORY INFORMATION SYSTEM	19					3
PHARMACY INFORMATION SYSTEM	22				2	1
PHYSICIAN SUPPORT SYSTEM	22				1	
HOSPITAL FINANCIAL INFO. SYSTM	13				11	1

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
***********						
BUDGET PREPARATICN	142	2	6	1	184	27
BUDGET POSITION CCNTROL	124	4	5		157	25
FACULTY SALARY ANALYSIS	126	1			189	22
FACULTY ACTIVITY ANALYSIS	111	1	1		154	15
RESOURCF REQUIREMENTS MODELING	112				71	7
LONG RANGE PLANNING	221			1	55	5
HEGIS REPORTING	78	1	1	2	240	17
INSTITUTIONAL CODING STRUCTURF	92	1		2	127	22
***********						
GENERAL FUND EXPENDITURES	35	16	21		260	32
GENERAL ACCTS. RECEIVABLE	84	16	28	2	201	21
ACCOUNTS PAYABLE	57	19	21	1	224	35
EMPLOYEE BENEFIT ACCOUNTING	78	7	5		231	21
BANK ACCOUNT RECONCILIATION	162	3	6	2	153	9
INVESTMENT RECORDS	186	4	12		52	7
GRANT & CONTRACT ADMINISTRAT.	168	7	8		117	9
RESEARCH PROPOSAL MONITORING	184	2	4		29	7
TUITICN & FEE ACCOUNTING	45	9	12	1	249	45
STORES ACCOUNTING	144	9	12		113	13
***********						
FACILITIES UTILIZATION ANAL.	153	1		2	164	9
PERSONNEL RECORDS	142			2	174	43
PERSONNEL PLACEMENT	288				20	4
STAFF ETHNIC GROUP REPORTING	184	1	2	1	132	10
***********						
FACULTY CLUB BILLING	68	2			17	2
STUDENT DIRECTORY PREPARATION	32			2	234	17
FOOD SERVICE MENU & INVENTORY	182	2	1		14	2
***********						
PURCHASING INFORMATION SYSTEM	213	2	4		78	15
STORES INVENTORY	216	1	3	1	72	7
EQUIPMENT INVENTORY	128	1	1		191	12
PARKING LOT SPACE ASSIGNMENT	192		1		10	1
CRIME REPORTING	220		3		7	1
MOTOR POOL RECORDS	190		1		21	1
***********						
PHYSICAL PLANT JOB SCHEDULING	289			2	14	1
EQUIPMENT PREVENTATIVE MAINTEN	266		2	1	24	1
***********						
GRADUATE ADMISSIONS PRCCESSING	60			1	119	44
COURSE CATALOG RFCORDS	73			4	212	69
STUDENT CLASS SCHEDULING	114			1	167	60
STUDENT REGISTRATION PROCFSS.	17			2	282	79
TERM STUDENT RECORDS & REPORTS	4			1	333	38
ENROLLMENT REPORTING	9			1	333	37
STUDENT ETHNIC GROUP REPORTING	32		1	1	293	35
HONORS PROGRAM RECCRDS	64		2	1	230	24
DEGREE REQUIREMENTS EVAL.	256		1	2	60	13
***********						
FINANCIAL AWARDS	190	3	2		136	20
WORK STUDY RECORDS	162	2	2		179	14
***********						
CATALOGING	223		1	1	51	50
CIRCULATION CONTRCL	257			2	47	17
BIBLIOGRAPHICAL SEARCH SERVICE	211		1		30	46
EDUCATIONAL MEDIA SERVICES	241			1	39	14
***********						
FOUNDATION & GIFT RECORDS	158	1	6	2	110	23
CURRICULUM PLANNING	264			2	19	1
TEACHER PLACFMENT	237			1	11	7
STUDENT COUNSFLING RFCORDS	245			1	31	4
ATHELETIC EVENT TICKET SYSTEM	180			1	30	4
***********						
HOSPITAL CENSUS	21				6	3
APPOINTMENTS & SCHFDULING	30					
COMMUNICATIONS & ORDER ENTFY	25				1	1
HOUSEKFEPING	29				1	
RADIOLCGY INFORMATICN SYSTEM	18				1	1
NURSING STATION SUPPORT SYSTEM	21				2	
PATIENT BILLING/ACCTS. REC.	11				12	2

GROUP (10000-19999)

TOTAL NUMBER OF INSTITUTIONS = 205 TOTAL NUMBER OF INSTITUTIONS REPORTING = 131

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
********** PLANNING, MANAGEMENT & INSTITUTIONAL RESEARCH						
BUDGET FORECASTING	58				35	5
BUDGET ANALYSIS	39		4		54	7
INSTITUTIONAL COST STUDIES	30	1			62	6
SUPPORT STAFF SALARY ANALYSIS	29			1	63	8
SUPPORT STAFF ACTIVITY ANAL.	41				25	4
STUDENT FLOW MODELING	39				39	1
ENROLLMENT FORECASTING	53				37	6
DATA ELEMENT DICTIONARY	30				42	6
********** FINANCIAL MANAGEMENT APPLICATIONS						
GENERAL FUND LEDGER	11	3	8		72	10
DEPARTMENTAL EXPENDITURES	7	3	3	1	80	11
STUDENTS ACCTS. RECEIVABLE	13	2	2		75	11
PAYROLL	3	1			79	16
RETIREMENT SYSTEM ACCOUNTING	7	1			75	7
CASH FLOW PROJECTION	51				24	
INVESTMENT EVALUATION	56				13	
RESEARCH PROJECT ACCOUNTING	30	3	1		41	6
FINANCIAL AID ACCOUNTING	13	1		1	76	13
RESIDENCE HALL ACCOUNTING	12	1	2	1	49	7
TELEPHONE ACCOUNTING	36		3		48	2
********** GENERAL ADMINISTRATIVE SERVICE APPLICATIONS						
FACILITIES INVENTORY (SPACE)	18				73	7
CLASSROOM UTILIZATION ANAL.	27				67	4
PERSONNEL EVALUATION	81				13	2
HEW COMPLIANCE REPORTING	33				68	1
CIVIL SERVICE POSITION RECORDS	32				20	4
********** AUXILIARY SERVICE APPLICATIONS						
FACULTY/STAFF DIRECTORY	26		1		67	5
RESIDENCE HALL ASSIGNMENT	44				21	7
STUDENT HOUSING REPORTS	22				46	2
BOOKSTORE INVENTORY & OPERATNS	55	2	2		21	4
********** LOGISTICS AND RELATED SERVICES						
PURCHASE ORDER FOLLOW-UP	69				21	6
VENDOR INFORMATION SYSTEM	48				33	13
OFFICE MACHINE REPAIR CONTROL	73				7	1
AUTOMOBILE REGISTRATION	42				37	6
TRAFFIC VIOLATION RECORDS	43				29	5
CAR POOL MATCHING	29			1	17	1
********** PHYSICAL PLANT OPERATIONS						
PHYSICAL PLANT ACCOUNTING	53		3		41	1
BUILDING MAINTENANCE COSTS	65		2		27	
KEY INVENTORY	77		1		16	
********** ADMISSIONS AND RECORDS APPLICATIONS						
UNDERGRAD. ADMISSIONS PROCESS.	3				76	28
HIGH SCHOOL TESTING RECORDS	16				63	8
SCHEDULE OF CLASSES PREPARATN.	17				70	21
TUITION & FEE ASSESSMENT	22				62	18
CLASS ROSTERS	1				97	10
COURSE ADD/DROP PROCESSING	1				77	30
ENROLLMENT STATISTICS	1				101	7
TERM GRADE REPORTING	1				102	5
STUDENT TRANSCRIPT RECORDS	35				62	6
CORRESPONDENCE COURSE RECORDS	34				13	3
********** FINANCIAL AID ADMINISTRATION						
FINANCIAL AID EVALUATION	60				31	10
STUDENT EMPLOYMENT RECORDS	33		1		55	9
********** LIBRARY APPLICATIONS						
ACQUISITIONS	52				28	14
CARD & MATERIAL PREP. & CONTRL	51				24	16
SERIALS HOLDINGS	43			1	37	11
FUGITIVE MATERIAL INDEXING	65				4	3
********** OTHER ADMINISTRATIVE APPLICATIONS						
ALUMNI RECORDS	18				69	8
TEST SCORING & ANALYSIS	17			3	76	3
TEACHER EVALUATION	45				53	1
FRATERNITY/SORORITY RUSH RECDS	42				7	
STUDENT PSYCHOLOGICAL TESTING	66				11	
********** HOSPITAL APPLICATIONS						
PATIENT REGISTRATION/ADMISSION	10				4	6
MEDICAL RECORDS	15				4	7
CENTRAL SUPPLY INVENTORY	15				3	1
DIETARY/FOOD SERVICE	16					1
LABORATORY INFORMATION SYSTEM	13					4
PHARMACY INFORMATION SYSTEM	13				1	3
PHYSICIAN SUPPORT SYSTEM	15				1	2
HOSPITAL FINANCIAL INFO. SYSTM	9				9	

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
**********						
BUDGET PREPARATION	37		1		62	5
BUDGET POSITION CONTROL	34		2		48	10
FACULTY SALARY ANALYSIS	18			1	77	6
FACULTY ACTIVITY ANALYSIS	23				64	6
RESOURCE REQUIREMENTS MODELING	36				28	6
LONG RANGE PLANNING	68				16	4
HEGIS REPORTING	20				81	4
INSTITUTIONAL CODING STRUCTURE	28			1	49	7
**********						
GENERAL FUND EXPENDITURES	7	4	5		76	13
GENERAL ACCTS. RECEIVABLE	19	6	5	1	60	8
ACCOUNTS PAYABLE	16	4	1	2	71	11
EMPLOYEE BENEFIT ACCOUNTING	8	1			77	8
BANK ACCOUNT RECONCILIATION	28	2		2	59	1
INVESTMENT RECORDS	51				21	
GRANT & CONTRACT ADMINISTRAT.	52	1			34	6
RESEARCH PROPOSAL MONITORING	59	1			11	1
TUITION & FEE ACCOUNTING	9		2		79	11
STORES ACCOUNTING	33	4	4		45	3
**********						
FACILITIES UTILIZATION ANAL.	28				63	5
PERSONNEL RECORDS	16				64	23
PERSONNEL PLACEMENT	76				8	5
STAFF ETHNIC GROUP REPORTING	27				73	3
**********						
FACULTY CLUB BILLING	20				3	
STUDENT DIRECTORY PREPARATION	11				67	4
FOOD SERVICE MENU & INVENTORY	57				4	2
**********						
PURCHASING INFORMATION SYSTEM	54				29	9
STORES INVENTORY	52			1	32	3
EQUIPMENT INVENTORY	23	1			69	3
PARKING LOT SPACE ASSIGNMENT	55				10	2
CRIME REPORTING	60				4	2
MOTOR POOL RECORDS	58				8	
**********						
PHYSICAL PLANT JOB SCHEDULING	78		1		10	1
EQUIPMENT PREVENTATIVE MAINTEN	80				11	
**********						
GRADUATE ADMISSIONS PROCESSING	10				56	17
COURSE CATALOG RECORDS	14				69	21
STUDENT CLASS SCHEDULING	21				58	18
STUDENT REGISTRATION PROCESS.	3				80	25
TERM STUDENT RECORDS & REPORTS	1				99	8
ENROLLMENT REPORTING	1				101	6
STUDENT ETHNIC GROUP REPORTING	4				98	2
HONORS PROGRAM RECORDS	13				74	5
DEGREE REQUIREMENTS EVAL.	73				20	3
**********						
FINANCIAL AWARDS	40				53	11
WORK STUDY RECORDS	30				61	10
**********						
CATALOGING	44				17	32
CIRCULATION CONTROL	60				24	9
BIBLIOGRAPHICAL SEARCH SERVICE	52				12	21
EDUCATIONAL MEDIA SERVICES	65				16	6
**********						
FOUNDATION & GIFT RECORDS	40	1			41	3
CURRICULUM PLANNING	74				13	1
TEACHER PLACEMENT	73		1		3	4
STUDENT COUNSELING RECORDS	76				6	1
ATHELETIC EVENT TICKET SYSTEM	62				13	1
**********						
HOSPITAL CENSUS	10				4	3
APPOINTMENTS & SCHEDULING	17				1	2
COMMUNICATIONS & ORDER ENTRY	15				1	2
HOUSEKEEPING	17					1
RADIOLOGY INFORMATION SYSTEM	14					3
NURSING STATION SUPPORT SYSTEM	15				2	2
PATIENT BILLING/ACCTS. REC.	7				11	

INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION FOR 1976-77
CONDUCTED BY THE COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF MISSOURI-ROLLA
WITH SUPPORT FROM THE NATIONAL SCIENCE FOUNDATION

GROUP I ABOVE 20000)

TOTAL NUMBER OF INSTITUTIONS = 112

TOTAL NUMBER OF INSTITUTIONS REPORTING = 77

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
********** PLANNING, MANAGEMENT & INSTITUTIONAL RESEARCH						
BUDGET FORECASTING	33				26	5
BUDGET ANALYSIS	12				49	7
INSTITUTIONAL COST STUDIES	10				53	4
SUPPORT STAFF SALARY ANALYSIS	9				51	5
SUPPORT STAFF ACTIVITY ANAL.	19				22	3
STUDENT FLOW MODELING	11				34	1
ENROLLMENT FORECASTING	31				30	2
DATA ELEMENT DICTIONARY	16				21	13
********** FINANCIAL MANAGEMENT APPLICATIONS						
GENERAL FUND LEDGER	5	1	1		53	8
DEPARTMENTAL EXPENDITURES	1				56	11
STUDENTS ACCTS. RECEIVABLE	10	1			44	7
PAYROLL	3				53	14
RETIREMENT SYSTEM ACCOUNTING	7				47	8
CASH FLOW PROJECTION	37				21	1
INVESTMENT EVALUATION	37			1	12	2
RESEARCH PROJECT ACCOUNTING	13	1			39	4
FINANCIAL AID ACCOUNTING	5				51	10
RESIDENCE HALL ACCOUNTING	2	2		1	35	7
TELEPHONE ACCOUNTING	16				45	3
********** GENERAL ADMINISTRATIVE SERVICE APPLICATIONS						
FACILITIES INVENTORY (SPACE)	6				52	8
CLASSROOM UTILIZATION ANAL.	7				56	2
PERSONNEL EVALUATION	48				12	2
HEW COMPLIANCE REPORTING	11				51	2
CIVIL SERVICE POSITION RECORDS	15				11	4
********** AUXILIARY SERVICE APPLICATIONS						
FACULTY/STAFF DIRECTORY	16				39	9
RESIDENCE HALL ASSIGNMENT	16			1	21	9
STUDENT HOUSING REPORTS	4				37	5
BOOKSTORE INVENTORY & OPERATNS	22	2	1		21	5
********** LOGISTICS AND RELATED SERVICES						
PURCHASE ORDER FOLLOW-UP	36				16	9
VENDOR INFORMATION SYSTEM	25				24	13
OFFICE MACHINE REPAIR CONTROL	47				7	
AUTOMOBILE REGISTRATION	28			1	21	5
TRAFFIC VIOLATION RECORDS	24			2	16	8
CAR POOL MATCHING	21				17	1
********** PHYSICAL PLANT OPERATIONS						
PHYSICAL PLANT ACCOUNTING	16	1	1	1	35	6
BUILDING MAINTENANCE COSTS	28	1			29	1
KEY INVENTORY	44				10	2
********** ADMISSIONS AND RECORDS APPLICATIONS						
UNDERGRAD. ADMISSIONS PROCESS.	4				39	23
HIGH SCHOOL TESTING RECORDS	2				44	13
SCHEDULE OF CLASSES PREPARATN.	8				43	16
TUITION & FEE ASSESSMENT	7				44	12
CLASS ROSTERS	1				59	7
COURSE ADD/DROP PROCESSING					49	18
ENROLLMENT STATISTICS					65	2
TERM GRADE REPORTING					63	4
STUDENT TRANSCRIPT RECORDS	20	1			34	11
CORRESPONDENCE COURSE RECORDS	16			1	15	4
********** FINANCIAL AID ADMINISTRATION						
FINANCIAL AID EVALUATION	24				31	8
STUDENT EMPLOYMENT RECORDS	26	1			32	3
********** LIBRARY APPLICATIONS						
ACQUISITIONS	24	2	1		23	5
CARD & MATERIAL PREP. & CONTRL	20			3	17	12
SERIALS HOLDINGS	16	1			32	7
FUGITIVE MATERIAL INDEXING	34				4	3
********** OTHER ADMINISTRATIVE APPLICATIONS						
ALUMNI RECORDS	5				42	12
TEST SCORING & ANALYSIS	3			2	54	1
TEACHER EVALUATION	26			1	30	
FRATERNITY/SORORITY RUSH RECDS	24			2	12	
STUDENT PSYCHOLOGICAL TESTING	30				11	
********** HOSPITAL APPLICATIONS						
PATIENT REGISTRATION/ADMISSION	8	1			2	10
MEDICAL RECORDS	9	1			7	6
CENTRAL SUPPLY INVENTORY	12	1			6	3
DIETARY/FOOD SERVICE	13				3	3
LABORATORY INFORMATION SYSTEM	9				2	9
PHARMACY INFORMATION SYSTEM	10				3	7
PHYSICIAN SUPPORT SYSTEM	13				2	2
HOSPITAL FINANCIAL INFO. SYSTM	8	1			11	1

	MAN-UAL	BKPG MCHN	LEDG ACC	EAM	BTCH PROC	ON LINE
**********						
BUDGET PREPARATION	12				42	16
BUDGET POSITION CONTROL	12				39	16
FACULTY SALARY ANALYSIS	5				57	6
FACULTY ACTIVITY ANALYSIS	11				49	3
RESOURCE REQUIREMENTS MODELING	16				27	2
LONG RANGE PLANNING	35				16	1
HEGIS REPORTING	8				50	1
INSTITUTIONAL CODING STRUCTURE	12				31	6
**********						
GENERAL FUND EXPENDITURES	1				59	9
GENERAL ACCTS. RECEIVABLE	12	1			45	8
ACCOUNTS PAYABLE	10			1	49	6
EMPLOYEE BENEFIT ACCOUNTING	7				52	8
BANK ACCOUNT RECONCILIATION	13	1		1	43	3
INVESTMENT RECORDS	26		1	2	22	3
GRANT & CONTRACT ADMINISTRAT.	27				34	4
RESEARCH PROPOSAL MONITORING	31				20	1
TUITION & FEE ACCOUNTING	4				53	8
STORES ACCOUNTING	7		1		46	8
**********						
FACILITIES UTILIZATION ANAL.	8				49	4
PERSONNEL RECORDS	10				40	16
PERSONNEL PLACEMENT	49				5	2
STAFF ETHNIC GROUP REPORTING	6				55	2
**********						
FACULTY CLUB BILLING	23				10	
STUDENT DIRECTORY PREPARATION	3				49	4
FOOD SERVICE MENU & INVENTORY	27			1	12	4
**********						
PURCHASING INFORMATION SYSTEM	35				12	13
STORES INVENTORY	22		1		33	6
EQUIPMENT INVENTORY	15			2	43	6
PARKING LOT SPACE ASSIGNMENT	28			1	16	2
CRIME REPORTING	40				5	3
MOTOR POOL RECORDS	27				17	
**********						
PHYSICAL PLANT JOB SCHEDULING	34				18	4
EQUIPMENT PREVENTATIVE MAINTEN	43		1		11	1
**********						
GRADUATE ADMISSIONS PROCESSING	6				30	18
COURSE CATALOG RECORDS	3				44	20
STUDENT CLASS SCHEDULING	6				47	13
STUDENT REGISTRATION PROCESS.					50	17
TERM STUDENT RECORDS & REPORTS	1				55	11
ENROLLMENT REPORTING					65	2
STUDENT ETHNIC GROUP REPORTING					65	1
HONORS PROGRAM RECORDS	10				49	4
DEGREE REQUIREMENTS EVAL.	38				24	4
**********						
FINANCIAL AWARDS	16				37	11
WORK STUDY RECORDS	23	1			35	3
**********						
CATALOGING	16	1			20	18
CIRCULATION CONTROL	20				26	13
BIBLIOGRAPHICAL SEARCH SERVICE	19				13	18
EDUCATIONAL MEDIA SERVICES	31			1	11	7
**********						
FOUNDATION & GIFT RECORDS	22				27	14
CURRICULUM PLANNING	48				9	1
TEACHER PLACEMENT	43				8	
STUDENT COUNSELING RECORDS	40				9	2
ATHELETIC EVENT TICKET SYSTEM	36			1	9	4
**********						
HOSPITAL CENSUS	6	1			5	8
APPOINTMENTS & SCHEDULING	14	1				6
COMMUNICATIONS & ORDER ENTRY	11	1			3	3
HOUSEKEEPING	19				1	
RADIOLOGY INFORMATION SYSTEM	9				3	6
NURSING STATION SUPPORT SYSTEM	13				1	3
PATIENT BILLING/ACCTS. REC.	5	1			10	5

XII. Appendix

Forms and Instructions

FICHE Fourth Inventory of Computers in Higher Education

Project Director:
John W. Hamblen
Associate Director:
Thomas B. Baird

Computer Science Department
University of Missouri - Rolla
Rolla, Missouri 65401
314-341-4491

Dear Sir:

The enclosed letter from Dr. Shinn states that we will prepare a comprehensive report from the data collected on the enclosed forms and that an Executive Summary will be provided to the heads of the responding institutions. I am certain that you will agree that such reports should be available at the earliest possible dates to be of greatest use.

Your cooperation is solicited in meeting our schedule.

Our goal is to have the publication ready for distribution by January, 1979. All copy is to be ready by November, 1978. In order that progress on returns can be monitored we will send notices confirming receipt of forms which have been returned. Reminders will start around October 1.

Sincerely,

John W. Hamblen

John W. Hamblen
Project Director

Enclosures

Supported by the NATIONAL SCIENCE FOUNDATION

NATIONAL SCIENCE FOUNDATION
WASHINGTON, D.C. 20550

nsf

OFFICE OF THE
ASSISTANT DIRECTOR
FOR SCIENCE EDUCATION

Dear Mr. President:

In order to foster scientific advancement and facilitate efforts to upgrade the computing activities of academic institutions, the National Science Foundation requests your cooperation in this survey, Inventory of Computers, Applications of Computers, and Instructional Programs in U. S. Higher Education, 1976-77. Publication of a comprehensive report in two volumes is planned for this effort. However, data collected in the survey will not be published in any way that will identify the institution with the financial details supplied on Form #1.

These reports afford an opportunity to compare your institution with those of other institutions of comparable size, type and level of offering. The grant provides for an executive summary to be sent to you around September 1978 if your institution responds.

If questions arise, please write or telephone collect (314) 341-4491, Dr. John W. Hamblen, Professor and Chairman, Computer Science Department, University of Missouri - Rolla, Rolla, Missouri 65401.

We are grateful for your past assistance in the 1964-65, 1966-67, and 1969-70 studies and will greatly appreciate your help with the present inventory.

Sincerely,

Allen M. Shinn Jr.

Allen M. Shinn, Jr.
Deputy Assistant Director
for Science Education

DO NOT RETURN THIS PAGE

DISTRIBUTION OF FORMS:

In many institutions several sets of forms will be required. The size of the forms is such that they can be easily reproduced on any copying machine. The respondent may wish to make copies for working paper and to retain a set of the completed forms for his own purposes. These may be reproduced locally or additional supplies requested from:

FICHE
Computer Science Department
University of Missouri - Rolla
Rolla, MO 65401

FORMS 1 and 2 are INSTALLATION ORIENTED

therefore, the respondent institution should submit appropriate ones for each installation. An installation is defined as an administrative unit which has equipment in use of the type listed on Form 1 and for which it is fiscally and/or administratively responsible. (e.g. Computer Centers, Departments having computers, etc.)

FORM 3 is for reporting COURSES and/or DEGREE PROGRAMS

(e.g. Computer Science Departments, other Departments with degree programs in Computer Science, Information Science, Data Processing, and similar options in other areas such as Mathematics, Electrical Engineering, etc.; A new form should be used for each different degree program. (e.g., A Computer Science offering at both the bachelor's and master's level is to be considered as one program if offered by the same department.)

COURSES in these areas which are not part of a degree program should also be reported on a separate FORM 3. In this case line 03 should be left blank. More than one page may be used if needed.

FORM 4 is for reporting INSTITUTIONAL ADMINISTRATIVE APPLICATIONS

This form consists of a checklist for indicating the general level of machine processing techniques being used in administrative applications.

Inventory of Computers, Applications of Computers and
Instructional Programs in U.S. Higher Education
1976-77

FOR YOUR OFFICE USE ONLY

Distribution of Forms Within the Institution

DO NOT RETURN THIS PAGE

1. **Installation or Office:** ____________________

   Person Responsible: ____________________

   Forms Furnished: No. 1 ☐ No. 2 ☐ No. 3 ☐ No. 4 ☐

   Forms Returned: No. 1 ☐ No. 2 ☐ No. 3 ☐ No. 4 ☐

2. **Installation or Office:** ____________________

   Person Responsible: ____________________

   Forms Furnished: No. 1 ☐ No. 2 ☐ No. 3 ☐ No. 4 ☐

   Forms Returned: No. 1 ☐ No. 2 ☐ No. 3 ☐ No. 4 ☐

3. **Installation or Office:** ____________________

   Person Responsible: ____________________

   Forms Furnished: No. 1 ☐ No. 2 ☐ No. 3 ☐ No. 4 ☐

   Forms Returned: No. 1 ☐ No. 2 ☐ No. 3 ☐ No. 4 ☐

4. **Installation or Office:** ____________________

   Person Responsible: ____________________

   Forms Furnished: No. 1 ☐ No. 2 ☐ No. 3 ☐ No. 4 ☐

   Forms Returned: No. 1 ☐ No. 2 ☐ No. 3 ☐ No. 4 ☐

5. **Installation or Office:** ____________________

   Person Responsible: ____________________

   Forms Furnished: No. 1 ☐ No. 2 ☐ No. 3 ☐ No. 4 ☐

   Forms Returned: No. 1 ☐ No. 2 ☐ No. 3 ☐ No. 4 ☐

6. **Installation or Office:** ____________________

   Person Responsible: ____________________

   Forms Furnished: No. 1 ☐ No. 2 ☐ No. 3 ☐ No. 4 ☐

   Forms Returned: No. 1 ☐ No. 2 ☐ No. 3 ☐ No. 4 ☐

FIRST CLASS
Permit No. 1
Sec. 510, P.L & R.
ROLLA, MO.

BUSINESS REPLY MAIL

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**Inventory of Computers
In Higher Education
Computer Science Department
University of Missouri - Rolla
Rolla, Missouri 65401**

INVENTORY OF COMPUTERS IN HIGHER EDUCATION OMB NO. 099 S77007

PLEASE SEND ADDITIONAL FORMS AS INDICATED: APPROVAL EXPIRES 9/30/78

	No. copies		No. copies
FORM 1	______	INSTRUCTIONS FOR FORM 1	______
FORM 2	______	INSTRUCTIONS FOR FORM 2	______
FORM 3	______	INSTRUCTIONS FOR FORM 3	______
FORM 4	______	INSTRUCTIONS FOR FORM 4	______

Name ______

Title ______

Institution ______

Address ______

City ______ State ______ Zip Code ______

FORM NO. 1

INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS,
AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION: 1976-77
Conducted by the Computer Science Dept., University of Missouri-Rolla under a Grant from the National Science Foundation

OMB NO. 099 S77007
APPROVAL EXPIRES: 9/30/78

FORM 1 EXPENDITURES, SOURCES OF SUPPORT, STAFF, COMPUTERS, AND LANGUAGES

1 ST. ___ 3 INST. ___ 8 INSTA. ___ 10 FORM 1

01 (11) ___ 13 ___ 14 ___ 15 ___ 16 ___ COMPUTER INSTALLATION OR DEPARTMENT NAME ___ HEAD REPORTS TO ___ TITLE ___ 46 ___ 48 ___ INSTITUTION NAME

02 (11) 13 ___ ADDRESS ___ CITY ___ 58 ST. ___ 60 ZIP CODE ___

NAME OF OFF CAMPUS FACILITY USED: 65 ___ CO-OP OR NON-PROFIT ___ 68 ___ COLLEGE OR UNIV. ___ 71 ___ COMMERCIAL ___

	TOTAL EXPENDITURES IN THOUSANDS OF DOLLARS									
	CAPITAL 1976-77			OPERATING 1976-77						
								OFF CAMPUS SERVICES		
	HARDWARE	SOFTWARE	BLDG. & FURN.	STAFF	HDWARE. LEASE	SOFTWARE SVCS.	OTHER OPER.	CO-OP OR NON-PROFIT	COLLEGE OR UNIV.	COMMERCIAL
03 (11)	13 ___	17 ___	21 ___	25 ___	29 ___	33 ___	37 ___	41 ___	45 ___	49 ___

	PAST & FUTURE EXPENDITURES			SOURCE OF FUNDS OR INCOME (THOUSANDS OF DOLLARS) 1976-77							TYPE OF BILLING	FACILITIES MANAGEMENT CONTRACT
							OFF-CAMPUS SERVICE INCOME					
	1974-75	1975-76	PROJECTED 1977-78	INSTITUTION	STATE AGENCIES	FEDERAL	CO-OP OR NON-PROFIT	COLLEGE OR UNIV.	COMMERCIAL	OTHER		
04 (11)	13 ___	18 ___	23 ___	28 ___	33 ___	38 ___	43 ___	48 ___	53 ___	57 ___	61	63

	STAFF PAID FOR BY INSTALLATION																	
	NUMBER OF PEOPLE		FULL-TIME EQUIVALENTS						HIGHEST LEVEL OF EDUCATION									% FTE USER SVCS.
									DOCTORATE		MASTERS		BACHELORS		UND. GRAD.	ASSOC. DEG.	H-S-DIPL.	
	FULL-TIME	PART-TIME	MGT.	CLK.	ANALYSTS	SYS. PRGMRS	APPL. PRGMRS	OPERATORS	COMP. SCI.	OTHER	COMP. SCI.	OTHER	COMP. SCI.					
05 (11)	13 ___	16 ___	19 ___	21 ___	23 ___	25 ___	27 ___	29 ___	31 ___	33 ___	35 ___	37 ___	39 ___	41 ___	43 ___	45 ___	47 ___	49 ___

COMPUTERS

	QTY.	MFG.	18	MODEL NUMBER	DC	YR. INSTL.	*	LEASED		PURCHASED		HRS. AVAILABLE PER MO.	TYPE OF USAGE					NUMBER OF TAPE DRIVES	ON LINE STORAGE IN THOUSANDS (K) OR MILLIONS (M) OF ALPHA CHARACTERS			COMM. PORTS	
																EXTERNAL							
								MFG.	HOLD CO.	MFG.	OTHER		RES	ADM	INSTR	HIGH ED.	OTHER		CORE (K)	DISC (M)	OTHER (M)	BATCH	INT' ACT.
06 (11)	13 ___	15 ___		19 ___	26	27 ___	29	30	31	32	33	34 ___	37 ___	40 ___	43 ___	46 ___	49 ___	52 ___	54 ___	58 ___	62 ___	66 ___	69 ___
07				___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
08 (11)	13 ___	15 ___		19 ___	26	27 ___	29	30	31	32	33	34 ___	37 ___	40 ___	43 ___	46 ___	49 ___	52 ___	54 ___	58 ___	62 ___	66 ___	69 ___
09				___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
10 (11)	13 ___	15 ___		19 ___	26	27 ___	29	30	31	32	33	34 ___	37 ___	40 ___	43 ___	46 ___	49 ___	52 ___	54 ___	58 ___	62 ___	66 ___	69 ___
11				___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___
12 (11)	13 ___	15 ___		19 ___	26	27 ___	29	30	31	32	33	34 ___	37 ___	40 ___	43 ___	46 ___	49 ___	52 ___	54 ___	58 ___	62 ___	66 ___	69 ___
13				___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___	___

14 (11) THIS INSTALLATION PROVIDES: 13 ___ BASIC 14 ___ APL 15 ___ COBOL 16 ___ FORTRAN 17 ___ PL/I 18 ___ GRAPHICS 19 ___ RPG 20 ___ COURSEWRITER 21 ___ PLANIT 22 ___ PASCAL 23 ___ LOGO 24 ___ TUTOR 25 ___ OTHER

THIS INSTALLATION USES: 26 ___ INTERACTIVE COMPUTING 27 ___ REMOTE COMPUTING SERVICES FROM ANOTHER INSTALLATION.

15 (11) RESPONDENT ___ NAME ___ TITLE ___ PHONE NO. ___ AREA CODE ___

Instructions for Forms Completion: Inventory of Computers, Applications of Computers, and Instructional Programs in U.S. Higher Education, 1976-77. Conducted by the Computer Science Department, University of Missouri-Rolla under a grant form the National Science Foundation.

FORM NO. 1 EXPENDITURES, SOURCES OF INCOME, STAFF AND COMPUTERS

Purpose: To provide general information on the financial support, staff, and computer systems available for computer or data processing facilities at institutions of higher education.

Who Should Respond:

1. An installation is defined to be an administrative unit which has general service computing equipment, for which it is fiscally and/or administratively responsible.
2. FORM 1 is to be completed for each installation having at least one general service computer, including a terminal, or a small computer system used as a terminal, if it is your institution's principal computer system.
3. Miscellaneous mini-computers not in general service should not be reported as separate installations, but be summarized on a separate FORM 1.
4. If you have any questions, call John Hamblen or Tom Baird, collect, at 314-341-4491.

General Instructions:

1. Report Expenditures and Sources of Income for July 1, 1976 - June 30, 1977, or the nearest 12-month period. Report Staff as of June 30, 1977.
2. Where card column numbers are given, use only the number of characters indicated, abbreviate or truncate where necessary. Zeros should be supplied where needed to distinguish from a no-response.

Line No.	Columns	Description	Instructions and/or Definitions
01	16-45	Computer Installation or Department Name	Enter the name of the Computer Center, Data Processing Department, or whatever the installation is called if it operated as a distinct administrative unit. Otherwise, enter the name of the Academic Department or Administrative Office which is administratively responsible for the operation of the installation.
01	No Column Restrictions	Title	Enter the complete title of the person(s) to whom the head of the computer installation is responsible, such as Vice President for Research, Head of Civil Engineering, Dean of Academic Affairs, Registrar, Controller, etc.
01	46-47	Title Code	(ignore)
01	48-77	Institution Name	Formal name of Institution. Abbreviate to 30 letters.
02	13-37	Address	Enter the mailing address of the institution. Include the street address only if it is essential.
02	38-57	City	
02	58-59	State	Please use U.S. Postal Service two-letter code for state.
02	60-64	Zip Code	Zip code is very important, please provide.
		Name of Off-Campus Facility Used:	If your installation used the computer facilities of off-campus organizations please write in an abbreviated name which will identify the supplier(s). (It is possible that some installations may be using the computer services of more than one type and more than one supplier of a given type. Enter all such suppliers.)
02	65-67	Co-op. or Non Profit	(Note: Card column spaces should be left blank. Enter responses according to type in the longer spaces provided and below them if more space is needed.)
02	68-70	College or University	
02	71-73	Commercial	

FORM NO. 1 EXPENDITURES, SOURCES OF INCOME, STAFF AND COMPUTERS (Continued)

Line No.	Columns	Description	Instructions and/or Definitions
		Expenditures:	All items should be reported to the nearest thousand dollars (whole numbers - no decimals).
		Capital Expenditures for 1976-77:	
03	13-16	Hardware Purchases	Amount in thousands expended for purchases of computer hardware. (Include purchases of communications and auxiliary equipment.
03	17-20	Software Purchases	Amount in thousands expended for purchases of software packages.
03	21-24	Buildings & Furniture	Amount in thousands expended for buildings, rental of buildings, renovation, and furniture. (Include air conditioning, power outlets, office furniture as well as data processing cabinets, files, etc.)
		Operating Expenditures 1976-77:	
03	25-28	Staff 1976-77	Amount in thousands paid in FY 1976-77 for salaries and wages plus benefits.
03	29-32	Hardware Leasing	Amount in thousands paid in FY 1976-77 for hardware leasing, rentals, etc. (Including rentals for communications and auxiliary equipment.)
03	33-36	Software Services	Amount in thousands paid in FY 1976-77 for software leasing, development or modification. (Including Systems Engineering Services, etc.)
03	37-40	Other Operating	Amount in thousands paid in FY 1976-77 for other operating expenses such as supplies, maintenance, communication, (tolls, leased lines, etc.).
		Off-Campus Services	
03	41-44	Co-op or Non-Profit	Amount in thousands paid in FY 1976-77 for computer services bought from Co-op or Non-profit organizations.
03	45-48	College or University	Amount in thousands paid in FY 1976-77 for computer services bought from a college or university organization including parent institutions.
03	49-52	Commercial	Amount in thousands paid in FY 1976-77 for computer services bought from a commercial organization.
		Past and Future Expenditures	
04	13-17	Total Expenditures 1974-75	Amount in thousands spent in FY 1974-75 for total computer related expenditures. (If the installation did not exist during 1974-75, enter N.A.).
04	18-22	Total Expenditures 1975-76	Amount in thousands spent in FY 1975-76 for total computer related expenditures. (If the installation did not exist during 1975-76, enter N.A.).
04	23-27	Total Expenditures Projected 1977-78	Projected amount, in thousands, to be spent in FY 1977-78 for total computer related expenditures. (Will usually equal total annual budget for July 1, 1977 - June 30, 1978).
		Sources of Income 1976-77	
04	28-32	Institution	The amount in thousands of FY 1976-77 total funds provided out of the institution's own funds. (For public institutions the regular governmental appropriations for their operation expenses would be included here. However, if a state agency reimbursed the institution for its usage of the installation's computer, these funds should be reported under "State Agencies".)

FORM NO. 1 EXPENDITURES, SOURCES OF INCOME, STAFF AND COMPUTERS (Continued)

Line No.	Columns	Description	Instructions and/or Definitions
04	33-37	State Agencies	Income in thousands from state government agencies for services rendered. (Do not include funds appropriated for institution's operations.)
04	38-42	Federal	The total amount in thousands of funds received from all Federal sources for computing services and activities of this installation.
	Off-Campus Service Income		
04	43-47	Co-op or Non-profit	Income in thousands earned in FY 1976-77 from computer services provided to Co-op or Non-profit organizations.
04	48-52	College or University	Income in thousands earned in FY 1976-77 from computer services provided to other colleges or universities.
04	53-56	Commercial	Income in thousands earned in FY 1976-77 from computer services provided to commercial organizations.
	Other		
04	57-60	Other	The amount in thousands earned in FY 1976-77 from computer services provided to other groups not mentioned above.
	Type of Billing		
04	61	Type of Billing	Use the code shown to indicate the installation's primary method of billing users in its own institution. Code Type 1 - No billing (Budgeted installation). 2 - Billing against funds budgeted and allocated to users for sole purpose. 3 - Billing against funds not restricted for that purpose only.
04	62		If your installation is being operated under a Facilities Management Contract enter an "X" in column 62.
	Staff Paid for by Installation:		
05	13-15	Full-time	Head count of persons who are employed full-time by the installation.
05	16-18	Part-time	Head count of persons who are employed only part-time by the installation.
	Full-time Equivalents (FTE):		Add to the number of full-time people employed in each category below the sum of all the fractions for the part-time people in that category rounded to the nearest whole number. Do not record fractions or decimals.
05	19-20	Management	The FTE for professional staff involved in the management of the installation (e.g. Directors, Assistant Directors, Managers, Assistant Managers).
05	21-22	Clerical	FTE for clerks, secretaries, librarians, etc.
05	23-24	Analysts	FTE for data systems analysts, includes administrative data systems analysts if employed by this installation.
05	25-26	Systems Programmers	FTE for programmers with responsibility to create and/or maintain the operating systems programs.
05	27-28	Applications Programmers	FTE for all other programmers.
05	29-30	Operators	FTE for all machine operators. Include cardpunch, EAM and auxiliary equipment operators as well as computer operators.

Line No.	Columns	Description	Instructions and/or Definitions

Highest Level of Education: Enter the number of persons on your staff fitting each category defined by highest degree earned and the type of degree as indicated. Computer Sciences degrees should include Computer Science, Information Science, Data Processing, etc.

Line No.	Columns	Description	Instructions and/or Definitions
05	31-32	Doctorate in Computer Sciences.	
05	33-34	Other Doctorates.	
05	35-36	Master's/1st Professional degree in Computer Sciences.	
05	37-38	Other Master's/1st Professional degrees.	
05	39-40	Bachelor's degree in Computer Sciences.	
05	41-42	Other Bachelor's degrees.	
05	43-44	Without Bachelor's degree but more than two years college and pursuing a Bachelor's degree.	
05	45-46	Associate's degree or at least 2 years college but not pursuing a degree.	
05	47-48	Less than 2 years college.	

User Services

Line No.	Columns	Description	Instructions and/or Definitions
05	49-50	Percent of your total FTE directly involved with "User Services".	

Computers: Lines 6-13 are to be used to report the computers utilized by your installation and information concerning them. Major general service computers should be reported on a line by themselves unless information on two or more is identical. If your installation is responsible for several mini-computers they may be included in abbreviated form. To avoid duplication, major network or service bureau computers including computers from other colleges and universities utilized by your installation should be reported with a zero in the quantity field. Complete only the quantity, manufacturer and model number columns for network or service bureau computers and for groups of mini-computers being reported together on one line. Please include in this section information available on all computers installed or to be installed prior to December 31, 1977.

Line No.	Columns	Description	Instructions and/or Definitions
06	13-14	Quantity	Enter the number of computers being reported on this line. (Enter a zero for network or service bureau computers.)
06	15-17	Manufacturer	Enter the appropriate three letter code from the following list to denote the manufacturer of the computer.

Code	Manufacturer Name	Code	Manufacturer Name	Code	Manufacturer Name	Code	Manufacturer Name
ADG	Adage	DAC	Datacraft	HUG	Hughes	SEL	Systems Eng. Lab.
AMD	Amdahl	DAM	Datamate	IBM	IBM	SPI	Spiras
ARM	Arma	DCD	Decade	ITK	Information Technology	STD	Standard Computer
BLY	Bailey	DEL	Digital Electronic	INT	Interdata	TEM	Tempo
BEK	Beckman	DEC	Digital Equipment Corp.	LOC	Lockheed	TEN	Tenet
BIT	BIT	DSC	Digital Scientific	MIC	Micro-Systems	TEC	Tec-lite
BUR	Burroughs	DYR	Dynamic Research	MOT	Motorola	TXI	Texas Instruments
COL	Collins	EAI	Electronic Associates	MUL	Multidata	UCP	Uni-comp
COM	Comcet	EMR	EMR	NCR	National Cash Register	UCM	Unicom
CSI	Compiler Systems	FOM	Foto-Mem	PRI	Prime	UNI	Univac
CAU	Computer Automation	GAM	General Automation	RAY	Raytheon	VAR	Varian Data
CLS	Computer Logic Systems	GEC	General Electric	RCA	Radio Corporation	WAN	Wang
CDC	Control Data Corporation	HAR	Harris	RED	Redcor	WES	Westinghouse
DAG	Data General	HEP	Hewlett Packard	SAN	Sanders	XDS	Xerox Data System
DAT	Data Technology	HON	Honeywell	SCC	Scientific Control		

FORM NO. 1 EXPENDITURES, SOURCES OF INCOME, STAFF AND COMPUTERS (Continued)

Line No.	Columns	Description	Instructions and/or Definitions
06	18		(Leave blank, except for special, non-commercially available computer, see next item.)
06	19-25	Model Number	Model number assigned by manufacturer. In a few cases institutions have built computers with such names as MANIAC III, ILLIAC II, MIT-TXO, etc. In such cases use columns 15-25 as needed to enter the name of machine.
06	26	DC (Direct Couple) or (Terminal)	A) In some cases two computers are cabled together and function as a unit (not to be confused with remote terminal concept, although similar). In this case one computer (slave) is under the control of the other (master). List the master first, enter a dash ("-") in column 26 and then list the slave computer on the next line, after entries for "master" line are completed. B) If the computer is sometimes employed as a terminal then enter a "T" in column 26. [If column 26 was not used for (A)].
06	27-28	Year Installed	Enter the last two digits of the calendar year in which each computer was first installed at the institution.
06	29	Installed After June 30, 1977	Enter an "X" in column 29 if the computer is to be installed after June 30, 1977 and before December 31, 1977 and answer only appropriate items.
	Leased:		(Consider a loaned machine as a leased one at no cost.)
06	30	Manufacturer	If the computer (or any part of it) is leased directly from the manufacturer enter an "X" here.
06	31	Holding Company	If the computer (or any part of it) is leased directly from a holding company or a leasing firm enter an "X" here.
	Purchased:		
06	32	Manufacturer	If the computer (or any part of it) was purchased directly from the manufacturer enter an "X" here.
06	33	Other	If the computer (or any part of it) was purchased from any other source enter an "X" here.
06	34-36	Hours Available	Report availability in average hours/month for all purposes for installed computer. Enter average monthly availability over all or part of period July 1, 1976-June 30, 1977 for machines installed during that fiscal year. Use current estimates for recently installed machines, leave blank if machines are not yet installed or in use.
	Type of Usage:		Report average usage to the nearest percent. Round to nearest whole number. Do not use decimals.
06	37-39	Research	"Research", "Administration" and "Instruction" refer to installation's uses in support of such activities within the parent institution.
06	40-42	Administration	
06	43-45	Instruction	
	External		Usage external to the parent institution should be reported only in the categories of other "Higher Education" users and "Other".
06	46-48	Higher Education	
06	49-51	Other	

Line No.	Columns	Description	Instructions and/or Definitions
06	52-53	Number of Tape Drives	Report maximum number of magnetic tape drives on-line at any one time.
		On-Line Storage Available in Thousands (K) or Millions (M) of Alpha Characters	Maximum storage capacity of computer at any one time. Do not include capacity of disk-packs on the shelf.
06	54-57	Magnetic Core (K)	Enter the size of the magnetic core storage in thousands (K) of alpha characters (e.g. a 32K word, 36 bit binary machine would have 192K alpha character capacity).
06	58-61	Disk (M)	Enter the capacity of disk units on-line at any given time in millions (M) of alpha characters.
06	62-65	Other (M)	Enter the capacity of other types of storage not listed above in millions (M) of alpha characters.
		Communication Ports	
06	66-68	Batch	Enter the number of Ports primarily used for Batch Processing.
06	69-72	Interactive	Enter the number of Ports primarily used for Interactive Processing.
07-13			Repeat using instructions for line 06 as needed for reporting the computers for this installation. If more than eight lines are needed for this installation, lines 06-13 of a second page of FORM 1 should be used.
		Languages Provided:	
14	13	BASIC	For columns numbered 13-25 enter an "X" for each language provided by this installation.
14	14	APL	
14	15	COBOL	
14	16	FORTRAN	
14	17	PL/I	
14	18	GRAPHICS	
14	19	RPG	
14	20	COURSEWRITER	
14	21	PLANIT	
14	22	PASCAL	
14	23	LOGO	
14	24	TUTOR	
14	25	Other	
		Installation Uses:	
14	26	Interactive Computing	For columns 26-27 enter an "X" for each mode of computing services used from another installation.
14	27	Remote Computing	
15	No Restrictions		
		Respondent Name Title Telephone Number	Please enter the name, title and telephone number of the individual to whom inquiries should be made if clarification is needed.

FORM NO. 2

INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION: 1976-77
Conducted by the Computer Science Dept., University of Missouri-Rolla under a Grant from the National Science Foundation

OMB NO. 099 S77007
APPROVAL EXPIRES: 9/30/78

FORM 2 INSTRUCTIONAL & RESEARCH USE BY ACADEMIC AREA FOR PERIOD JULY 1, 1976 - JUNE 30, 1977

1 ST. ___ 3 INST. ___ 6 INSTA ___ 10 FORM 2

01 11 ___ 13 ___ 14 ___ 15 ___ 16 COMPUTER INSTALLATION OR DEPARTMENT NAME ___ HEAD REPORTS TO ___ TITLE ___ 46 ___ 48 INSTITUTION NAME ___

02 11 ___ 13 ADDRESS ___ 38 CITY ___ 58 ST ___ 60 ZIP CODE ___

NAME OF OFF CAMPUS FACILITY USED: 65 ___ COOP OR NON-PROFIT ___ 68 ___ COLLEGE OR UNIVERSITY ___ 71 ___ COMMERCIAL ___

	INSTALLATION FUNCTION		
03 11	NETWORK ONLY 13	NETWORK AND LOCAL 14	LOCAL ONLY 15

LOWEST LEVEL OF USAGE RECORDED FOR BILLING AND/OR COST ACCOUNTING OR CONTROL						
NO RECORDS 16	CAMPUS 17	SCHOOL OR COLLEGE 18	DEPT. 19	COURSE NUMBER 20	COURSES BY SECTION 21	INDIVIDUAL STUDENTS IN COURSES 22

ALL DOLLAR AMOUNTS IN THOUSANDS

	ACADEMIC FIELDS AND DISCIPLINES	TOTAL STUDENT USE: UNDERGRADUATE AND GRADUATE				USE BY FACULTY AND STAFF				MODE OR TYPE OF INSTRUCTIONAL USE					USE OF OTHER COMPUTERS	
						FACULTY RESEARCH		OTHER								
		NO. OF COURSES USING INSTAL.	NO. OF STUDENTS USING INSTALLATION	COST OF COMPUTER SERVICES IN COURSE WORK	STUDENT RESEARCH INCLUDING NON-CREDIT COURSES	SPON.	NON-SPON.	SOFTWARE DEVELOP	MISC.	PROB SOL	SIMUL	CAT	CAI	CMI	ON CAMPUS	OFF CAMPUS
04 11	ENGINEERING	13	16	21	25	29	33	37	41	45	46		48	49	50	51
05	ENVIRONMENTAL AND LIFE SCIENCES															
06	COMPUTER SCIENCES	13	16	21	25	29	33	37	41	45	46		48	49	50	51
07	MATHEMATICS AND STATISTICS															
08 11	PHYSICAL SCIENCES	13	16	21	25	29	33	37	41	45	46		48	49	50	51
09	PSYCHOLOGY															
10 11	SOCIAL SCIENCES	13	16	21	25	29	33	37	41	45	46	47	48	49	50	51
11	EDUCATION															
12 11	BUSINESS AND COMMERCE	13	16	21	25	29	33	37	41	45	46		48	49	50	51
13	ALL OTHER															

14 RESPONDENT ___ NAME TITLE ___ PHONE NO. ___ AREA CODE ___

Instructions for Forms Completion: Inventory of Computers, Applications of Computers, and Instructional Programs in U.S. Higher Education 1976-77. Conducted by the Computer Science Department, University of Missouri-Rolla under a grant from the National Science Foundation.

FORM NO. 2 INSTRUCTIONAL AND RESEARCH USAGE BY ACADEMIC FIELDS AND DISCIPLINES.

Purpose: To provide data by academic area concerning instructional and research usage of the computer installation reported on FORM 1.

Who Should Respond:

1. FORM 2 is requested for each installation reported on a FORM 1.
2. Each installation should respond through line three and further if appropriate (see instruction 5) and records allow.
3. Services supplied by the local installation, either from their own computers or from remote facilities, should be included if data is available.
4. Network installations, serving through other reporting installations should make appropriate data available to those installations.
5. Network installations should report beyond line three only if they also function as a direct local supplier for some campus. In that case, the report should contain only the value of the local services and general non-billed support activities.
6. If you have any questions, call John Hamblen or Tom Baird, collect, at 314-341-4491.

General Instructions:

1. The Academic Areas described on this form are compatible with National Science Foundation CASE reporting categories. (See list at end of instructions)
2. Study the grouping of the DISCIPLINES before completing this form.
3. If an Academic Area does not exist at the institution or is not included in the area served by your particular installation, then leave that line blank.
4. The reporting period for FORM 2 should be July 1, 1976 to June 30, 1977 or the nearest twelve-month period available. Only the first summer session should be included. If other period is used include only that summer session which coincided most with the reporting period used in FORM 1.
5. Where card column numbers are given, use only the number of characters indicated, abbreviate or truncate where necessary. Zeros should be supplied where needed to distinguish from a no-response.

Line No.	Columns	Description	Instructions and/or Definitions
01-02			The information supplied in lines 01 and 02 should be identical to that recorded on the corresponding FORM 1.
03	13-22	Line 03 is self-explanatory	Place an "X" in the appropriate box in each section of line 03. If you do not keep usage records at least at the department level you will not be able to complete this form, particulary lines 05-10.
		Student Use in Course Work: (Total Undergraduate and Graduate)	To be filled out by installations with appropriate records available.
04-13	13-15	Number of Different Courses Using Installation	Enter the number of credit courses in the designated academic area which have made use of the computing facilities of this installation.
04-13	16-20	Total Number of Students Using Installation in Course Work	Enter the total number of students enrolled in those courses who have at one time or another during the report-period used the installation for course work in this academic area. (This is a difficult one, supply your best estimates.)

FORM NO. 2 INSTRUCTIONAL AND RESEARCH USAGE BY ACADEMIC FIELDS AND DISCIPLINES (Continued)

Line No.	Columns	Description	Instructions and/or Definitions
04-13	21-24	Total Cost of Computer Services (in thousands of dollars) for course work.	Enter the cost of computer services, to the nearest thousand dollars, provided to all students who used the computer(s) in this installation in connection with their course work in this academic area during the reporting period. Round to nearest thousand, do not report decimals.
04-13	25-28	Student Research, etc.	Enter the value of computer services for student research and/or non-credit courses. Round to the nearest thousand dollars, etc.
Use by Faculty and Staff:			
	Faculty Research:		
04-13	29-32	Sponsored	Enter the value of all computer services furnished to this academic area for sponsored faculty research. In general "sponsored" means that funds are provided from a source outside of the institution to pay for services. Include funds provided by an affiliated research foundation. Round to nearest thousand dollars, etc.
04-13	33-36	Non-sponsored	Enter the value of all computer services furnished to this academic area for non-sponsored faculty research. Round to nearest thousand dollars, etc.
	Other:		
04-13	37-40	Software Development	Enter the value of all computer services furnished for software development for this academic area. (General software development costs may be allocated across several academic areas.) Round to the nearest thousand dollars, etc.
04-13	41-44	Miscellaneous	Enter the value of all computer services furnished for all other research for this academic area other than faculty or student research and that reported under software development. Round to the nearest thousand dollars, etc. (e.g. use of computer by faculty as consultants, etc.)
04-13	45	Problem Solving	In columns 45-49 place an "X" in each column for which the instructional mode is used in the academic area.
04-13	46	Simulation	
04-13	47	Computer Assisted Testing	
04-13	48	Computer Assisted Instruction	
04-13	49	Computer Managed Instruction	
Access to and/or use of other computers:			
04-13	50	On Campus	Are other on-campus computers used by this academic area? (Use one of the following codes. Do not leave blank.) 0 = No 1 = Yes 2 = Don't know
04-13	51	Off-Campus	Are other computers used off-campus by this academic area? (Use one of the following codes. Do not leave blank.) 0 = No 1 = Yes 2 = Don't know
14	No Restrictions	Respondent Name Title Telephone Number	Please enter the name, title and telephone number of the individual to whom inquiries should be made if clarification is needed.

DISCIPLINES INCLUDED IN THE FIELDS OF SCIENCE AND ENGINEERING (CASE)

Engineering	Chemical:	petroleum; petroleum refining; process
	Civil:	architectural; hydraulic; hydrologic; marine; sanitary and environmental; structural; transportation
	Electrical:	communication; electronic; power
	Other:	aerodynamics, astronautical; mechanical; metallurgy and materials; agricultural; industrial; nuclear; etc.
Environmental Sciences		atmospheric sciences; geological sciences; oceanography
Life Sciences		anatomy; animal sciences; bacteriology; biochemistry; biogeography; biological oceanography; bio-physics; dentistry; ecology; embryology; entomology; evolutionary biology; genetics; immunology; internal medicine; microbiology; neurology; nutrition and metabolism; opthalmology; parasitology; pathology; pharmacology; pharmacy; physical anthropology; physical medicine and rehabilitation; physiology; plant sciences; podiatry; preventive medicine and public health; psychiatry; radiobiology; radiology; surgery; systematics; veterinary medicine.
Mathematical Sciences	Computer Sciences:	including information sciences, data processing, computer technology
	Mathematics and Statistics:	algebra; analysis; applied mathematics; foundations and logic; geometry; numerical analysis; topology
Physical Sciences	Astronomy:	laboratory astrophysics; optical astronomy; radio astronomy; theoretical astrophysics; x-ray; gamma-ray; neutrino astronomy
	Chemistry:	inorganic; organometallic; organic; physical
	Physics:	acoustics; atomic and molecular; condensed matter; elementary particles; nuclear structure; optics; plasma
Psychology	Biological Aspects:	experimental, clinical and comparative psychology; animal behavior; ethology
	Social Aspects:	social, educational, vocational, industrial and engineering psychology; personnel; testing; development and personality.
Social Sciences	Economics:	econometrics and economic statistics; history of economic thought; international economics; industrial, labor and agricultural economics; macro-economics; micro-economics; public finance and fiscal policy; theory; economic systems and development.
	Other:	
	Anthropology:	archaeology; cultural and personality; social and ethnology; applied anthropology
	History:	cultural; political; social; history and philosophy of science
	Linguistics:	anthropological-archaeological; computational; psycholinguistics; socio-linguistics
	Political Science:	area or regional studies; comparative government; history of political ideas; international relations and law; national political and legal systems; political theory; public administration
	Sociology:	comparative and historical; complex organizations; culture and social structure; demography; group interactions; social problems and social welfare; sociological theory

Disciplines included in education and business according to HEGIS (Office of Education) taxonomy.

Education	All areas of education, i.e., from schools or departments of education, except educational psychology.
Business and Commerce	business administration; accounting; finance; banking; hotel or restaurant administration; marketing; real estate; insurance; secretarial studies; transportation.
All Other	To be used for all other fields and multidisciplinary and interdisciplinary projects which cannot be classified within one of the above primary fields or areas.

FORM NO. 3

INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS, AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION: 1976-77
Conducted by the Computer Science Dept., University of Missouri-Rolla under a Grant from the National Science Foundation.

OMB NO. 099 S77007
APPROVAL EXPIRES: 9/30/78

FORM 3 COMPUTER SCIENCES COURSES AND / OR DEGREE PROGRAMS

1 ST ___ 3 INST ___ 8 INSTA ___ 10 FORM 3

01 ___ 13 ___ 14 ___ 15 ___ 16 COMPUTER INSTALLATION OR DEPARTMENT NAME ___ HEAD REPORTS TO ___ TITLE ___ 43 ___ 46 ___ 48 INSTITUTION NAME ___

02 ___ 13 ADDRESS ___ 38 CITY ___ 58 ST ___ 60 ZIP CODE ___ RESPONDENT NAME ___ TITLE ___ PHONE NO. ___

	DEGREE PROGRAM														STAFF (1976 - 77)										STUDENTS (COMPUTER SCIENCE, ETC.)									
	DEPT CODE	PROG NAME CODE	DEGREE LEVEL AND YEAR OFFERED												NO. OF PEOPLE				TOTAL FTE	DOCT COMP SCI ETC		DOCT OTHER		NO JOINT APPT'S	MAJORS ENROLLED 1976-77		DEGREES AWARDED							
			ASSOC.			BACH.			MAST.			DOCT.			FULL TIME	PART TIME									UNDER GRAD	GRAD	1976-77				1977-78 (EST.)			
			76/77	77/78	78/79	76/77	77/78	78/79	76/77	77/78	78/79	76/77	77/78	78/		RES. ASSTS	TEACH ASSTS	OTHER		FACULTY	OTHER	FACULTY	OTHER				ASSOC.	BACH.	MAST.	DOCT.	ASSOC.	BACH.	MAST.	DOCT.
03	13		19	20	21	22	23	24	25	26	27	28	29	30	31	33	35	37	39	42	44	46	48	50	52 53		56	60	63	66	68	70	73	76

	COURSES		TERMS OFFERED			CREDIT HOURS	COURSE CLASSIFICATION CODE	OPERATION MODE	AVERAGE SECTION SIZE	TOTAL ENROLLMENT 1976-77	COST OF COMPUTER SCIENCES 1976-77 (HUNDREDS OF DOLLARS)	
	DEPT. CODE	COURSE NUMBER	76/77	77/78	78/79						IN DEPT.	OUT DEPT.
04	13	16	21	22	23	24	25	27	28	31	35	39
05												
06	13	16	21	22	23	24	25	27	28	31	35	39
07												
08	13	16	21	22	23	24	25	27	28	31	35	39
09												
10	13	16	21	22	23	24	25	27	28	31	35	39
11												
12	13	16	21	22	23	24	25	27	28	31	35	39
13												
14	13	16	21	22	23	24	25	27	28	31	35	39
15												
16	13	16	21	22	23	24	25	27	28	31	35	39
17												
18	13	16	21	22	23	24	25	27	28	31	35	39
19												

Instructions for Forms Completion: Inventory of Computers, Applications of Computers, and Instructional Programs in U.S. Higher Education, 1976-77. Conducted by the Computer Science Department, University of Missouri-Rolla under a grant from the National Science Foundation.

FORM NO. 3 COMPUTER SCIENCE COURSES AND/OR DEGREE PROGRAMS

Purpose: To provide data on courses and degree programs in Computer Science, Information Science, or Data Processing, and Computer Science majors in other areas such as Mathematics, Electrical Engineering, etc.

Who Should Respond:

1. FORM 3 should be completed for each department which offers a major program in Computer Science, Information Science, Data Processing, or similar Computer Science related major. Miscellaneous courses in departments not offering a major in the Computer Sciences can be listed on lines 04-19 of a separate FORM 3 with line 03 blank.
2. If you have any questions, call John Hamblen or Tom Baird, collect, at 314-341-4491.

General Instructions:

Where card column numbers are given, use only the number of characters indicated, abbreviate or truncate where necessary. Zeros should be supplied where needed to distinguish from a no-response.

Line No.	Columns	Description	Instructions and/or Definitions
01	16-44	Department Name	Each department within the same academic institution which offers a degree program in the computer sciences should complete a FORM 3. Enter the name of the department, abbreviated to 25 letters. The name of the school, division, college or committee should be used if a separate department does not exist.
01	No Restrictions	Title	The title of the person to whom the Head of the Department is responsible.
01	45	Semester or Quarter	Enter "S" for semester or "Q" for Quarter term to indicate school calendar.
01	46-47	Title Code	Leave blank.
01	48-77	Institution Name	The formal name of the academic institution.
02	13-37	Address	Include street address only if it is essential.
02	38-57	City	
02	58-59	State	Please use U.S. Postal abbreviation.
02	60-64	Zip Code	Zip Code is important.
02	No Column Restrictions	Respondent Name, Title, Telephone Number	Please enter the name, title and telephone number of the individual to whom inquiries should be made if clarification is needed.
03	13-15	Department Code	Enter the appropriate three character code from the following list:

Department Name	Code	Department Name	Code	Department Name	Code
Business Administration	BAD	Information and Computer Sci.	ICS	Environmental Sciences	ENV
Computer and Communications Sciences	CCS	Information Processing	IPR	Life Sciences	LSC
Computer and Information Sci.	CIS	Information Science	ISC	Mathematical Sciences	MSC
Computer Programming	CPR	Information Systems	ISY	Physical Sciences	PSC
Computer Science	CSC	Mathematics	MAT	Social Sciences	SSC
Computer Science and Engineering	CSE	Systems Analysis	SAN	Statistics and Computer Science	SCS
Computer Technology	CTE	Systems Engineering	SEN	Education	EDU
Data Processing	DPR	Systems and Information Sci.	SIS	Business, Commerce	BUS
Electrical Engineering	EEN	Systems Science	SYS	Other Departments not elsewhere classified	NEC
Electrical Engineering Tech.	EET	More than one of the above: Committee	COM		
Industrial Engineering	IEN	Other Departments in: Engineering	ENG		

FORM NO. 3 COMPUTER SCIENCE COURSES AND/OR DEGREEE PROGRAMS (Continued)

Line No.	Columns	Description	Instructions and/or Definitions
03	16-18	Degree Program Name Code	A department may have more than one computer-related degree program. A FORM 3 should be completed for each major program such as Computer Science, Information Science, Data Processing, etc. Enter the three-character code from the following list which best represents the degree program being reported.

Degree Program Name	Code	Degree Program Name	Code	Degree Program Name	Code
Computer Engineering	CEN	Data Processing	DPR	Systems Analysis	SAN
Computer Programming	CPR	Information Processing	IPR	Systems Engineering	SEN
Computer Science	CSC	Information and Control Sci.	ICS	Systems and Information Sciences	SIS
Computer Science Technology	CST	Information Science	ISC	Systems Sciences	SYS
Computer Technology	CTE	Information Systems	ISY	Other	OTH
Computer Science and Engineering	CSE				

Line No.	Columns	Description	Instructions and/or Definitions
03	19,20,21,22 23,24,25,26 27,28,29,30	Degree Level and Year Offered	Place an "X" in the appropriate cell to indicate the degree level and whether it was offered during 1976-77, is offered during 1977-78 and/or will be during 1978-79. "X" all appropriate cells.
	Staff: Number of People		
03	31-32	Full-time Staff	The number of people (head count) employed full-time in this degree program during 1976-77 (exclude secretarial and clerical).
	Part-time Staff		
03	33-34	Research Assistants	The number of people employed part-time as research assistants in this degree program during 1976-77.
03	35-36	Teaching Assistants	The number of people employed part-time as teaching assistants in this degree program during 1976-77.
03	37-38	Other	The number of people employed part-time in this degree program during 1976-77 other than research assistants and teaching assistants. (Exclude secretarial and clerical.)
	Full-time Equivalents		
03	39-41	Total FTE	FTE's should be reported to the nearest whole number. Add all fractions for part-time staff, round to nearest whole number and add number of full-time staff. (Exclude secretarial and clerical.) (1976-77)
	Doctorates in Computer Sciences, etc.		
03	42-43	Faculty	Enter the number of people with faculty status involved in this degree program during 1976-77 who had a doctorate in Computer Science or one of the degree programs listed above under Degree Program Names.
03	44-45	Other	Enter the number of staff in this degree program during 1976-77, other than faculty, who had a doctorate in Computer Science or one of the degree programs listed above under Degree Program Names.
	Doctorates in Other Fields		
03	46-47	Faculty	Enter the number of people with faculty status during 1976-77 involved in this degree program who had a doctorate in a field other than those listed above under Degree Program Names.

Line No.	Columns	Description	Instructions and/or Definitions
03	48-49	Other	Enter the number of staff in this degree program during 1976-77 other than faculty who had a doctorate in a field other than those listed above under Degree Program Names.
		Joint Appointments	
03	50-51	Joint Appointments	Enter the number of people employed during 1976-77 in this degree program who also had another appointment in the institution. (i.e. less than 100% FTE in this program)
		Students: Majors Enrolled (1976-77)	
03	52-54	Undergraduate	The number of undergraduate students enrolled as majors in this degree program during the period July 1, 1976-June 30, 1977. Do not include students enrolled during 1977 summer session but do include those enrolled in the 1976 summer session. Undergraduate means those who do not have a degree requiring at least four years.
03	55-57	Graduate	Same for graduate students except that graduate student is defined as one who has a first degree requiring at least four years.
		Degrees Awarded (1976-77)	
03	58-59	Associate	The number of students who graduated during the period July 1, 1976-June 30, 1977 as a major in this degree program. Do not include graduates from the 1977 summer session, but do include graduates from the 1976 summer session.
03	60-62	Bachelor's	
03	63-65	Master's	
03	66-67	Doctorate	
		1977-78 (Estimate)	
03	68-69	Associate	Estimate the number of students you expect to graduate during the period July 1, 1977-June 30, 1978 as majors in this degree program. Do not include the 1978 summer session but do include the 1977 summer session.
03	70-72	Bachelor's	
03	73-75	Master's	
03	76-77	Doctorate	

COURSES: Report credit courses only.

04-19	13-15	Department Code	Enter the appropriate three-character code from the list of departments given on page 1.
04-19	16-20	Course Number	Enter the catalog number used by your institution for the course. (e.g., if a Computer Science Department offers a course, say, C.S. 103, this course would be entered as CSC 103.)
		Terms Offered	
04-19	21,22,23	Number of Terms	Enter the numeral 0,1,2,3, or 4 which represents the number of terms the course was offered during 1976-77, is being offered during 1977-78, and your estimate of the number of times the course will be offered during 1978-79. (In each case count the summer session at the beginning of the reporting period.)

FORM NO. 3 COMPUTER SCIENCE COURSES AND/OR DEGREE PROGRAMS (Continued)

Line No.	Columns	Description	Instructions and/or Definitions
04-19	24	Credit Hours	Enter the number of credit hours received upon satisfactory completion of the course.
04-19	25-26	Course Classification Code	Enter the two-digit code for the descriptor which most nearly identifies the nature of each course. (See list below.)

Code	Course Descriptor
01	computer appreciation
02	problem solving course in the humanities
03	introductory course in some compiler language such as FORTRAN, PL/I, BASIC, ALGOL
04	introductory course in a language such as COBOL
05	problem solving course in engineering or scientific applications
06	introductory course in programming
07	advanced course in programming
08	first course in computer design
09	advanced course in computer design (computer architecture)
10	programming languages (structure, etc.)
11	operating systems (systems programming, etc.)
12	data structures
13	automata theory
14	simulation applications, non-econometric (for econometric applications see #50)
15	simulation languages and/or techniques
16	artificial intelligence (heuristic programming)
17	hybrid computers
18	descrete structures
19	computer organization
20	switching theory
21	sequential machines
22	compiler construction
23	formal languages and syntactic analysis
24	introductory computer organization
25	advanced computer organization
26	information storage and retrieval
27	computer graphics
28	computability
29	introductory numerical analysis (or methods)
30	advanced numerical analysis
31	introductory operations research
32	advanced operations research
33	data communications
34	process control
35	data preparation (key punch, verifier, data entry,...)
36	unit record (EAM)
37	introductory course in data processing
38	advanced course in data processing
39	problem solving course in business applications
40	advanced business applications (marketing, finance, production, etc.)
41	introductory systems analysis (business)
42	large scale information processing systems
43	file organization
44	data base management
45	information systems design (introductory)
46	information systems design (advanced)
47	management information systems
48	management of computer centers of information processing departments
49	computers and accounting (including auditing)
50	econometric simulation applications
51	instructional design
52	instructional systems
53	computer based instruction
54	other

Line No.	Columns	Description	Instructions and/or Definitions
04-19	27	Operation Mode	Which of the following modes of operation best describe how the course was operated during 1976-77 or the last time offered? L - Lecture only R - Lecture plus Laboratory T - Television or Film plus laboratory A - Lecture plus extensive use of visuals (slides, transparencies, etc.) E - Lecture plus extensive use of visuals plus a laboratory I - Individual study P - Laboratory D - Dissertation S - Seminar C - CAI
04-19	28-30	Average Section Size	The average number of students in one section of the course during 1976-1977.
04-19	31-34	Total Enrollment 1976-77	The total enrollment for all sections offered during the period July 1, 1976-June 30, 1977. (Include summer session 1976, but not summer session of 1977.)
	Value of Computer Services (Hundreds of Dollars) (Summer 1976 - Spring 1977)		To be filled out only by those departments who are billed by the Computer Installations used.
04-19	35-38	IN-DEPT.	The value of computer services (nearest hundred dollars) supplied to all sections of this course by computer facilities in the same department offering the course. Amounts under $50 should be recorded as "0".
04-19	39-42	OUT-DEPT.	The value of computer services (nearest hundred) supplied to all sections of the course by facilities on-campus but outside the department offering the course. Amounts under $50 should be recorded as "0".

FORM NO. 4

OMB NO. 099 S77007
APPROVAL EXPIRES: 9/30/78

FORM 4 INSTITUTIONAL ADMINISTRATIVE APPLICATIONS

INVENTORY OF COMPUTERS, APPLICATIONS OF COMPUTERS,
AND INSTRUCTIONAL PROGRAMS IN U.S. HIGHER EDUCATION: 1976-77
Conducted by the Computer Science Dept., University of Missouri-Rolla under a grant from
the National Science Foundation.

☐ ST ☐ INST ☐ INSTA ☐ FORM 4

01 ☐ ☐ ☐ COMPUTER INSTALLATION OR DEPARTMENT NAME ☐ INSTITUTION NAME

HEAD ______ REPORTS TO ______ TITLE ______

02 ADDRESS ______ CITY ______ ST ______ ZIP CODE ______

PLEASE ENTER THE APPROPRIATE CODE IN THE APPLICABLE SQUARE WHICH REFLECTS STATUS AS OF JUNE 30, 1977
USE BACK OF FORM FOR REPORTING ADDITIONAL APPLICATIONS

BLANK - NOT APPLICABLE
1 - MANUAL
2 - BOOKKEEPING MACHINE
3 - LEDGER ACCOUNTING
4 - EAM ONLY
5 - COMPUTER: BATCH PROCESSING
6 - COMPUTER: ON-LINE

SEE INSTRUCTION SHEETS FOR IDENTIFICATION FOR EACH SUB-AREA

03

PLANNING, MANAGEMENT & INSTITUTIONAL RESEARCH

☐ 50 1-1
☐ 1-2
☐ 1-3
☐ 1-4
☐ 1-5
☐ 45 1-6
☐ 1-7
☐ 1-8
☐ 1-9
☐ 1-10
☐ 40 1-11
☐ 1-12
☐ 1-13
☐ 1-14
☐ 1-15
☐ 35 1-16
☐ 1-17

FINANCIAL MANAGEMENT APPLICATIONS

☐ 33 2-1
☐ 2-2
☐ 2-3
☐ 30 2-4
☐ 2-5
☐ 2-6
☐ 2-7
☐ 2-8
☐ 25 2-9
☐ 2-10
☐ 2-11
☐ 2-12
☐ 2-13
☐ 20 2-14
☐ 2-15
☐ 2-16
☐ 2-17
☐ 2-18
☐ 15 2-19
☐ 2-20
☐ 13 2-21

GENERAL ADMINISTRATIVE SERVICE APPLICATIONS

☐ 78 3-1
☐ 3-2
☐ 3-3
☐ 75 3-4
☐ 3-5
☐ 3-6
☐ 3-7
☐ 3-8
☐ 70 3-9

AUXILIARY SERVICE APPLICATIONS

☐ 4-1
☐ 4-2
☐ 4-3
☐ 4-4
☐ 65 4-5
☐ 4-6
☐ 63 4-7

LOGISTICS AND RELATED SERVICES

☐ 5-1
☐ 5-2
☐ 60 5-3
☐ 5-4
☐ 5-5
☐ 5-6
☐ 5-7
☐ 55 5-8
☐ 5-9
☐ 5-10
☐ 5-11
☐ 51 5-12

04

PHYSICAL PLANT OPERATIONS

☐ 40 6-1
☐ 6-2
☐ 6-3
☐ 6-4
☐ 36 6-5

ADMISSIONS AND RECORDS APPLICATIONS

☐ 35 7-1
☐ 7-2
☐ 7-3
☐ 7-4
☐ 7-5
☐ 30 7-6
☐ 7-7
☐ 7-8
☐ 7-9
☐ 7-10
☐ 25 7-11
☐ 7-12
☐ 7-13
☐ 7-14
☐ 7-15
☐ 20 7-16
☐ 7-17
☐ 7-18
☐ 17 7-19

FINANCIAL AID ADMINISTRATION

☐ 8-1
☐ 15 8-2
☐ 8-3
☐ 13 8-4

LIBRARY APPLICATIONS

☐ 73 9-1
☐ 9-2
☐ 9-3
☐ 70 9-4
☐ 9-5
☐ 9-6
☐ 9-7
☐ 66 9-8

OTHER ADMINISTRATIVE APPLICATIONS

☐ 65 10-1
☐ 10-2
☐ 10-3
☐ 10-4
☐ 10-5
☐ 60 10-6
☐ 10-7
☐ 10-8
☐ 10-9
☐ 56 10-10

HOSPITAL APPLICATIONS

☐ 55 11-1
☐ 11-2
☐ 11-3
☐ 11-4
☐ 11-5
☐ 50 11-6
☐ 11-7
☐ 11-8
☐ 11-9
☐ 11-10
☐ 45 11-11
☐ 11-12
☐ 11-13
☐ 11-14
☐ 41 11-15

05 RESPONDENT ______ NAME ______ TITLE ______ PHONE NO. ______ AREA CODE ______

FORM NO. 4 Institutional Administrative Applications (Continued) (page 2)
Sub-Areas Items 1-1 through 5-12 identified.

Match left edge to blocks 1-1 through 2-21.

PLANNING, MANAGEMENT & INSTITUTIONAL RESEARCH

1-1 Budget Forecasting
1-2 Budget Preparation
1-3 Budget Analysis
1-4 Budget Position Control
1-5 Institutional Cost Studies
1-6 Faculty Salary Analysis
1-7 Support Staff Salary Analysis
1-8 Faculty Activity Analysis
1-9 Support Staff Activity Analysis
1-10 Induced Staff Activity Analysis
1-11 Resource Requirements Modeling
1-12 Student Flow Modeling
1-13 Long Range Planning
1-14 Enrollment Forecasting
1-15 HEGIS Reporting
1-16 Data Element Dictionary
1-17 Institutional Coding Structures

FINANCIAL MANAGEMENT APPLICATIONS

2-1 General Fund Ledger
2-2 General Fund Expenditure Accounting
2-3 Departmental Expenditure Accounting
2-4 General Accounts Receivable
2-5 Student Accounts Receivable
2-6 Accounts Payable
2-7 Payroll
2-8 Employee Benefit Accounting
2-9 Retirement System Accounting
2-10 Bank Account Reconciliation
2-11 Cash Flow Projection
2-12 Investment Records
2-13 Investment Evaluation
2-14 Grant & Contract Administration
2-15 Research Project Accounting
2-16 Research Proposal Monitoring
2-17 Financial Aid Accounting
2-18 Tuition & Fee Accounting
2-19 Residence Hall Accounting
2-20 Stores Accounting
2-21 Telephone Accounting

Fold at center and match fold to blocks 3-1 through 5-12.

GENERAL ADMINISTRATIVE SERVICE APPLICATIONS

3-1 Facilities Inventory (Space)
3-2 Facilities Utilization Analysis (Space)
3-3 Classroom Utilization Analysis
3-4 Personnel Records
3-5 Personnel Evaluation
3-6 Personnel Placement
3-7 HEW Compliance Reporting
3-8 Staff Ethnic Group Reporting
3-9 Civil Service Position Records

AUXILIARY SERVICE APPLICATIONS

4-1 Faculty/Staff Directory
4-2 Faculty Club Billing
4-3 Residence Hall Assignment
4-4 Student Directory Preparation
4-5 Student Housing Reports
4-6 Food Service Menu Planning & Inventory
4-7 Bookstore Inventory & Operations

LOGISTICS AND RELATED SERVICES

5-1 Purchase Order Follow-up
5-2 Purchasing Information System
5-3 Vendor Information System
5-4 Stores Inventory
5-5 Office Machine Repair Control
5-6 Equipment Inventory
5-7 Automobile Registration
5-8 Parking Lot Space Assignment
5-9 Traffic Violation Records
5-10 Crime Reporting
5-11 Car Pool Matching
5-12 Motor Pool Records

FORM NO. 4 Institutional Administrative Applications (Continued) (page 3)
Sub-Areas Items 6-1 through 8-4 identified.

Match left edge to blocks 6-1 through 8-4.

PHYSICAL PLANT OPERATIONS

6-1 Physical Plant Accounting
6-2 Physical Plant Job Scheduling
6-3 Building Maintenance Costs
6-4 Equipment Preventative Maintenance
6-5 Key Inventory

ADMISSIONS AND RECORDS APPLICATIONS

7-1 Undergraduate Admissions Processing
7-2 Graduate Admissions Processing
7-3 High School Testing Records
7-4 Course Master Records (Catalog)
7-5 Schedule of Classes Preparation
7-6 Student Class Scheduling
7-7 Tuition & Fee Assessment
7-8 Student Registration Processing
7-9 Class Rosters
7-10 Term Student Records & Reports
7-11 Course Add/Drop Processing
7-12 Enrollment Reporting
7-13 Enrollment Statistics
7-14 Student Ethnic Group Reporting
7-15 Term Grade Reporting
7-16 Honors Program Records
7-17 Student Transcript Master Records
7-18 Degree Requirements Evaluation
7-19 Correspondence Course Records

FINANCIAL AID ADMINISTRATION

8-1 Financial Aid Evaluation
8-2 Financial Awards
8-3 Student Employment Records
8-4 Work Study Records

Fold at center and match fold to blocks 9-1 through 11-15.

LIBRARY APPLICATIONS

9-1 Acquisitions
9-2 Cataloging
9-3 Card & Material Preparation & Control
9-4 Circulation Control
9-5 Serials Holdings
9-6 Bibliographical Search Service
9-7 Fugitive (Ephemeral) Material Indexing
9-8 Educational Media Services

OTHER ADMINISTRATIVE APPLICATIONS

10-1 Alumni Records
10-2 Foundation & Gift Records
10-3 Test Scoring & Analysis
10-4 Curriculum Planning
10-5 Teacher Evaluation
10-6 Teacher Placement
10-7 Fraternity/Sorority Rush Records
10-8 Student Counseling Records
10-9 Student Psychological Testing
10-10 Athletic Event Ticket System

HOSPITAL APPLICATIONS

11-1 Patient Registration/Admissions
11-2 Hospital Census
11-3 Medical Records
11-4 Appointments & Scheduling
11-5 Central Supply Inventory
11-6 Communications & Order Entry
11-7 Dietary/Food Service
11-8 Housekeeping
11-9 Laboratory Information System
11-10 Radiology Information System
11-11 Pharmacy Information System
11-12 Nursing Station Support System
11-13 Physician Support System
11-14 Patient Billing/Accounts Receivable
11-15 Hospital Financial Information System